

# MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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## Manufacturers' Record.

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Manufacturers' Record Publishing Co.

RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, Vice-President.  
FRANK GOULD, Secretary-Treasurer.

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BALTIMORE, JUNE 4, 1903.

### COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

In a letter to the Manufacturers' Record Mayor Lafayette C. Crile of Clarksburg, W. Va., writes:

Allow me to express my sincere thanks for the good that your journal is doing for the commercial welfare of the Southern States. The States south of the Mason and Dixon's line surely have a great future before them, and no journal that I know of is doing so much to call the attention of these resources to capital and labor as the Manufacturers' Record.

### DOUBLE TRACK AND BETTER STATIONS.

President Samuel Spencer of the Southern Railway Co., while on a visit to Washington, made the confirmatory statement, according to press dispatches, that the Southern's line will be double-tracked all the way from Washington to Atlanta, about 650 miles, and that \$25,000,000 will be spent on betterments, including second track. Several years will be required to complete this work, which is already under way.

For some time the Southern has been building second track in Virginia immediately south of Alexandria, and President Spencer is quoted as saying that at first it will be constructed on certain portions of the line in order to relieve crowded conditions, and afterwards the necessary intervening links will be built to complete a double-track road between Washington and Atlanta.

This construction of second track is a policy which must sooner or later be pursued by all the trunk-line railroads of the South. Probably the most conspicuous example of such work heretofore was offered by the Illinois Central, which has been building second track for some time, and is now at work on the last section of it, between Fulton, Ky., and Memphis, Tenn. When that is completed, together with some less important work in Mississippi, the company will have a double-tracked line all the way from Chicago to New Orleans. The

Norfolk & Western Railway is also doing considerable double-tracking on its line between Norfolk and Bristol, Va., the pressure of traffic having within the last few years become so great as to make this work a necessity. The time must come, and with the rapid development of industries in the South it will come perhaps sooner than is now expected, when all the main lines of railroad in that section of the country will have to be double-tracked in order to meet the regular requirements of freight and travel.

Although not specifically stated, the construction of new depots and terminal stations is doubtless included in the \$25,000,000 expenditure for betterments on the Southern's lines. The most notable improvement of this nature, upon which the preliminary work has begun, is the construction of the new union terminal in Atlanta, Ga., an improvement which has been needed for many years.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 69, 70 and 71.

### CAPTAIN MERRY'S GUESTS.

One of the most practical workers in the field of Southern immigration is Capt. J. F. Merry of Dubuque, Iowa, assistant general passenger agent of the Illinois Central Railroad. He has furthered many plans for inducing a movement of farmers of the West and Northwest to settle in the Mississippi valley. One of those plans was carried through last week, when more than a hundred real-estate agents from Iowa, Illinois, Minnesota, Nebraska, Indiana and Michigan were carried, under the guidance of Captain Merry, on a special train from Chicago to New Orleans, inspecting the lands in Kentucky, Tennessee, Mississippi and Louisiana, meeting representative business men of Memphis, New Orleans and other cities, and familiarizing themselves generally with Southern conditions. The visitors were warmly welcomed wherever they stopped, and the belief expressed by Captain Merry that their visit will result in great good in the way of settling the fertile lands of the Mississippi valley will, it is hoped, be promptly fulfilled, as it should be, in an influx of thousands of thrifty farmers from the less inviting regions of the West.

In celebration of its removal to its splendid new home, the Memphis Scimitar issued last week an art supplement of more than 100 broadside pages, illustrated with handsome half-tone pictures of men and things connected with the progress of the Western Tennessee metropolis. The supplement contains much matter about the progress of Memphis and about its opportunities, with a modest sketch of the career of the Scimitar, which has been such an efficient agent in the development of Memphis. It is not only interesting as marking a definite advance by the Scimitar, but it is

valuable as containing records of accomplished facts.

### WORKING FOR THE FORESTS.

The proceedings of the second annual meeting of the Tennessee Forest Association have been published in pamphlet form, and will be found of practical interest to everyone interested in the vital problem of checking the uneconomic inroads upon the timber supplies of the South and of making the forests a permanent source of wealth. With the proceedings are published the opening address by the president of the association, Col. J. B. Killebrew of Nashville, giving a broad view of the forestry conditions and urging active and strenuous missionary work to show the necessity for forest preservation, legislative exemption from taxation of areas planted in trees and properly cared for, the protection of young trees in lumbering camps, the prevention of the destruction of forests by fire, the establishment of timber reserves and greater economy in the use of wood for fuel and in building fences and houses. Above all, President Killebrew argued for the planting of trees, both by town people and country people. Complementary to this suggestion was a paper by the Rev. Dr. D. C. Kelley, dwelling upon sylviculture in cities as a means of benefitting the poorer classes. Other papers were by Dr. George Summey, on the necessity of preserving the forests at Monticello; by Miss Susie Gentry, on forests as an aid to culture; by Prof. Frederick W. Moore, explaining American carelessness about timber supplies; by P. H. Manning on the relations of geology and forests, and by Dr. R. H. Battle, making a strong plea for the national Appalachian forest reserve. The subject is one that cannot be too strongly emphasized, and the special plan of a national Appalachian reserve should be kept to the front between sessions of Congress.

### FOR THE TRUTH OF HISTORY.

The announcement by the Atlanta Constitution that it will shortly begin the publication in serial form of ex-Congressman Thomas E. Watson's review of the life and times of Thomas Jefferson will be received with satisfaction by everybody interested in the writing of American history. The review, it is announced, will not be confined to the years of Jefferson's life, but in reality will be a comprehensive survey of the important period between 1607, when English civilization was planted in this country at Jamestown, Va., until 1826, when the United States were well through their formative stage. With Jefferson as the central figure the history has been so written as to bring to the front a vast amount of information not to be found in books which usually pass for American history. It will emphasize the vital part played by Southern men in the making of this country, and demonstrate the breadth and depth of the patriotism and devotion to American ideals which have dominated the South. The work of Mr. Watson promises to be one of the

most important contributions to American history that has ever been published, and, as sketched by the Atlanta Constitution, ought to go a long way toward counteracting the distressing effects of what may be called the sectional philosophy of history which has so long prevailed in the writing of text-books, essays and speeches—effects which are painfully manifested in the mental attitude and utterances of not a few of the younger generation of Southern men having some reputation as educators, but betraying by their apparent ignorance of facts about the history of their country, their lack of equipment for the tasks they would essay. The broad-spirited enterprise of the Atlanta Constitution in giving such wide circulation of this work before its publication as a volume will appeal to thousands of students and other readers who have long waited for the inevitable writing of the truth.

### CURTIS GUILD AND THE SOUTH.

Our usually alert and ably-edited contemporary, the Fall River Herald, has evidently been wool-gathering. Referring to an editorial in the Manufacturers' Record of May 21, it says:

We gather from the editorial comments of the Manufacturers' Record that that usually fair-minded journal wants us to believe that Lieutenant-Governor Guild was correctly reported when he insisted that the South should be compelled by brute force in the shape of legislation to bring her industrial standards [up to those] in the North, and that he was not correctly reported when he took a broader view of the question.

The Manufacturers' Record did not question the accuracy of the account, as in a telegram from Boston, of Lieutenant-Governor Guild's speech of April 22 before the New England Cotton Manufacturers' Association at Boston, in which the Fall River Herald says he took "a broader view." How could we do so when it seemed so much in line with earlier utterances of his? The Herald itself, in an editorial published three weeks after the speech had been delivered and two weeks after criticism had been made of it, questioned the report, and said that Lieutenant-Governor Guild had been misunderstood and had not been accurately reported. Even then the only material point made by the Fall River Herald was to the effect that Lieutenant-Governor Guild "did not and does not insist, as alleged, that federal legislation must necessarily be invoked in order to bring the cotton industry in the South up to the Northern level."

Few persons really care whether or not Lieutenant-Governor Guild insists upon anything affecting the South except in so far as that insistence may reveal a state of mind of a small surviving element in New England who have been perniciously active in interference in Southern social problems, without necessarily being hostile to the South. Be that as it may, the Manufacturers' Record still insists that no one may question the accuracy of Mr. Guild's statements before the New England Cotton Manufacturers' Association on April 28, 1897, as published in the official Transactions

of that body, in discussing means for meeting Southern competition.

We cannot grow cotton in New England; neither can we make local taxation of mill property uniform; neither can we force the Southern cotton operative to strike for higher wages if he is content to work for his present remuneration.

There are two things, however, that legislation can accomplish—it can make a national regulation of the age of labor; it can make a national regulation of the hours of labor.

It might be necessary to amend the Constitution to do this, but the Constitution has been amended before. If a law for the national regulation of bankruptcy is possible, why not a law for the national regulation of the conditions of labor, that prosperity in one part of the country may not be obtained by disaster in another?

Such legislation naturally should be directed not to pulling the labor of Massachusetts down to the conditions of that in South Carolina, but rather to raising the labor of South Carolina to the condition of labor in Massachusetts.

The Manufacturers' Record still insists that no one has a right to question the accuracy of the statement in the editorial column of Mr. Guild's paper, the Commercial Bulletin of Boston of November 23, 1901, calling for "universal support" of the measure introduced into Congress by Congressman Lovering of Massachusetts for uniform labor throughout the Union, and concluding:

Meantime let us see to it that when the labor supply of the South does "catch up" a national labor law may raise the standards of Southern labor conditions to the level of the Massachusetts laws, safeguarding the health, the education and the hours of labor.

So much as to the Fall River Herald. What we have written regarding that, and especially the statements in our issue of May 21 to the effect that the account of Mr. Guild's speech of April 22, was but a part of the basis of criticism of Mr. Guild, may be of interest to the Commercial Bulletin. For that paper, in its issue of May 30, so refers to our editorial of April 30 as to indicate that it has not read carefully either that editorial or the later one of May 21.

The incentive to our comments of April 30, so far as they applied to Mr. Guild, was the account of his speech of April 22, 1903, printed as a press dispatch from Boston in one of the most reputable newspapers in the country, with no desire to misrepresent or misquote the speaker. Filling but a third of a column, it was obviously not a full report of the speech, but a summary of the portion of it of value as a press dispatch. With no desire to misrepresent Mr. Guild, the Manufacturers' Record reproduced the portions of the speech as quoted and based its comments not alone upon them, as the Bulletin seems to imagine, but also and largely upon extracts from the official publication of his speech of April 28, 1897, in the Transactions of the New England Cotton Manufacturers' Association, some of which are reproduced above. The Commercial Bulletin, referring to Mr. Guild's speech of April 22, says:

The speech in question, though delivered before the New England Cotton Manufacturers, quoted Vermont as permitting child labor as well as various Southern States, gave full credit to the South for bettering the condition of the poor whites, noted some Southern States that had already started on the praiseworthy work of reform, though to their own pecuniary disadvantage, and finally suggested that child labor, not in the South alone, but in all States and all industries, might perhaps be abolished without the need of changing the Constitution of the United States by means of uniform State legislation or by common consent of employers and employed.

We take these words as an authoritative summary of Mr. Guild's position in 1903, and we publish them with pleasure, and in full desire to represent Mr. Guild

correctly. We still fail to see, however, any radical difference between the general spirit—which was the matter criticized, and not the mere phraseology—of his speech of 1903 and the spirit of his speech of 1897 reinforced by the editorial of 1901 in his paper, the Commercial Bulletin. We fail to see any radical difference, in a discussion bearing upon Southern cotton-mill conditions, between a suggestion that to accomplish a certain reform "it might be necessary to amend the Constitution," and the suggestion that the reform "might, perhaps," be accomplished "without the need of changing the Constitution."

The impression of the speech given the Manufacturers' Record was not unique. The Philadelphia Press, commenting upon it on April 25, said:

The employment of children in mills and mines is bad enough at any age, but when there is no restriction it often results in cruelty. Instances of this fact were given in a speech delivered this week by Lieutenant-Governor Guild of Massachusetts before the New England Cotton Manufacturers' Association. He told of the employment in Southern mills of children of ten years of age, and even younger, at both night and day work. \* \* \* The South has abundant cheap labor without employing little children in the mills. It should not use those little innocents for any purpose, and certainly not to compete with New England in producing cotton cloths.

So, too, the Boston Journal, published in Mr. Guild's own town, and, presumably, friendly to him and desiring to represent him fairly, said editorially on April 23:

Lieutenant-Governor Guild, in his address before the New England Cotton Manufacturers yesterday, expressed graphically and tersely the sort of competition which New England cotton mills encounter in the South when he said that it is not proximity to the cotton field nor the climate, but cheap labor—especially cheap child labor—long hours, and the absence or the moderation of taxation, which account for the growth of the South in this department of manufacture. The remedy does not lie in depressing labor conditions here to the level of those that exist in the South, but in doing what may be done toward improving Southern labor conditions and toward bringing about some approach to uniformity in factory laws. \* \* \* This competition constitutes a serious handicap to the cotton manufacturers of New England, who cannot, if they would, and would not, if they could, carry on their mills under conditions similar to those prevailing in the Southern mills.

So, too, the Textile World Record, published also in Boston, in its May issue said:

The address of welcome was made by Gen. Curtis Guild, Jr., lieutenant-governor of Massachusetts. General Guild paid considerable attention to the child-labor question, contrasting the restrictions imposed in Massachusetts in the employment of women and children with the conditions existing in the rest of the Union, notably in the South. He came out emphatically for the passage of a national labor law which would place cotton manufacturers in all parts of the country on the same level as regards the employment of women and children of tender years. His address was frequently applauded, and it was plain that his hearers agreed with him in his policy of bringing other States to the level of Massachusetts.

These quotations are made for the purpose of suggesting that the complaints of Mr. Guild's friends about interpretations of his address should lie a little closer home than Baltimore.

That the Commercial Bulletin failed to grasp the purpose of the editorial of the Manufacturers' Record of April 30 is shown by the following invitation to the Manufacturers' Record:

The Bulletin invites its co-operation in the common aim of getting the little ones out of the factories into the schools, whether the laws that at present encourage the reverse movement be Vermont law or Georgia law.

The Manufacturers' Record suggests that as long as Georgia refrains from interfering with problems which Ver-

mont alone can settle right, Vermont should not attempt to settle problems which Georgia alone can settle right; that it is presumption for anyone to urge Massachusetts to interfere in either State, especially in view of the fact that it has accumulating problems of its own sufficient to tax its best energies for many years to come, and that talk of co-operation in philanthropy in conjunction with talk of competition in material things suggests the co-operation which induced the cat to pull the chestnuts from the fire.

Finally, it should be understood that criticism of an individual whose attitude may work damage is not necessarily a reflection upon his good intent, however narrow or selfish his viewpoint; that criticism of methods employed in looking out for Massachusetts is not a charge that there is personal animosity toward the South, and that the demand that people be permitted to attend to their own business is not sectionalism.

#### NEGRO MIGRATION FROM THE SOUTH.

It is reported from Boston that plans are making to bring about a movement of thousands of negroes from the South to Boston, whence they will be distributed to various places in the East and West. The story has something of a dream character, and even though there might be a purpose to bring about "an overwhelming transfer of negro workmen from the Southern plantations to the farms and workshops of the other sections of the country," that purpose could hardly be carried out. The main obstacle is the negroes themselves. The great body of them are not inclined to leave the South, where they have their best opportunities, to venture into other parts of the country where the opportunities are, as a rule, those which the negroes are especially disqualified to enjoy, and where they are likely to meet violent opposition whenever they are massed in sufficient numbers to menace the peace of the community or to disrupt industrial conditions. Such a situation would be likely to be promptly induced by the success of the reported Boston scheme.

The negroes are slowly migrating from the South with the demand for servants in the Eastern cities and for workmen in mines and manufactures in other parts of the country, and with the growing determination in the South to permit none who is a source of evil and loss to the community to be given countenance. The result is that, without counting the class of negroes who remain in the North each year only long enough to accumulate enough money to allow them to live without work in the South the rest of the year, probably one-tenth of the negro population of the country now lives outside the fourteen Southern States. It is probable that, nothing unforeseen happening, this number resulting from a movement from the South upon natural lines will gradually become greater and greater, but never pronounced enough or sudden enough to endanger the negroes in their new homes or to embarrass Southern industrial and agricultural undertakings.

In the meantime, the South will do well in emphasizing the fact that there are vast stretches of fertile lands within it removed from the objections which many persons have to dense negro population; that there are whole counties without a single negro inhabitant, and that the full realization of the agricultural and industrial potentialities of the country is largely dependent upon an in-

crease from outside of the white population of the South.

#### WARM WEATHER IN NASHVILLE.

It must have been very warm in Nashville the other night. It had been announced that "a recognized authority in Southern educational matters" and "a power on the Educational Board" would address the Chamber of Commerce, and that it was the desire of the Chamber to have a large and representative audience present. When the evening came the address was considerably shortened on account of "the oppressive heat," and the meeting was closed with a few remarks by the president of the Chamber, who thanked the speaker for his address, and assured him "that if he would come back in the fall he would speak to an audience that would be counted by hundreds instead of individuals," or "when the cool weather would insure a larger audience."

It would be interesting to know how much of the oppressive heat was due to the statement in the Nashville American in its advance notice of the address:

The work of the organization has been severely criticised by some of the papers in this section, notably the Manufacturers' Record of Baltimore. It is claimed that there is more behind the matter than the advancement of education. One theory is that it is a plan to advance negro education through a cunningly-devised system of federal appropriations.

As to the speech itself, something might be said about its "logic of statistics." But perhaps it will be time enough for that when there is assurance, in the absence of correction of the report, that the Nashville report of the speech which we would use is reasonably accurate, for one of the reports was manifestly a misunderstanding.

#### THE GAINESVILLE DISASTER.

To the story of death, suffering and loss by floods in the West has been added this week that of the terrible disaster at Gainesville, Ga., involving the death of probably 100 persons, the injury of 150 more, the destruction of homes of 800 persons and damage to other property. Such is the press summary of the results of the tornado of Monday last, which, appalling for any community, are especially so for the Georgia city of 6000 inhabitants. The sympathy of the country will undoubtedly reinforce promptly the measures for the relief of the suffering at Gainesville started at a mass-meeting of its citizens.

In a letter to the Manufacturers' Record Mr. Frank Randolph, secretary of the Crowley (La.) Progressive Union, writes:

In conversation with Mr. W. E. Lawson, secretary of the newly-organized Crowley Hotel Co., Ltd., he informed me recently that he has been receiving during the past six weeks since the hotel company was organized on an average of about a half-dozen letters a day from architects, builders and manufacturers of hotel supplies all over the country, who had gained their information as to our new hotel from reading a four-line notice in the Manufacturers' Record for the month of April. This seems to me to prove that the Manufacturers' Record is a very profitable advertising medium.

In a letter to the Manufacturers' Record the Concord Foundry and Machine Works, Concord, N. C., Mr. J. C. Blume, president, says:

We are constant readers of your journal each week, and must say there is no other publication that we receive that gives us more pleasure and more general information than does yours. We certainly appreciate what you have done for the South, and feel that you will be fully repaid for same.



**FOR COAL DEVELOPMENTS.****Reported Plans of R. H. Sayre in the Birmingham District.**

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., June 1.

From indications there is going to be, ere long, a substantial increase in the output of coal and coke in the Birmingham district, and with this more attention to scientific mining of both coal and ore. R. H. Sayre has recently closed for large tracts of land in the western part of the county, and it is his intention to develop them on a large scale, it is said. For some time the impression prevailed that Mr. Sayre was getting these lands for interests allied with the United States Steel Corporation, and reports were current that that organization intended to invade the district. The statement of Mr. Sayre's reported deal puts an end to this speculation. These lands are admirably located, and contain seams of the best coal to be found in the State. The story is that they will be largely developed, the work not only to include many openings, but a large number of coke ovens.

Other big coal developments are promised in Shelby and Bibb counties, where the Bessemer Land & Improvement Co. has acquired large holdings. The coal at these places is regarded as of the most desirable quality, so tough that it bears the roughest handling, and ideal for export purposes. The Bessemer Company has been for some time and is now operating mines at Henry Ellen, which have made a great deal of money for the stockholders. These mines are running out in some places, and on others leases only are held, and the company feels that it can do a more profitable business by owning its own properties. This company has done a very large business with Mexico, and sold other large orders for Texas and other waterboard States on the South.

The subject of coal is being given a great deal of attention just now, with the view of finding permanent market—one that will hold good in dull as well as flush times. To this end the outlook in Cuba is attracting much notice. Some time ago representatives of one of the big transportation companies in the island wrote to the head of a local company producing large quantities of coal, and asked that a trial cargo be shipped, giving prices that would make the experiment worth the while. Just at that time, however, domestic trade was so heavy and cars so hard to get that the project was not practical. These conditions have changed to some extent. While there is a persistent demand, and mines are busy to keep up with orders, it is possible to get out enough to make the trial, and it is understood the railroads are able to furnish cars. This being so, it is expected that the trial orders will be sent over pretty soon. Those who wish to buy state that it is practicable to buy all the coal needed in that country from the Alabama field, and that trade established would be for all time.

There is no new thing in the iron market. Prices are maintained, and not a maker for a moment will discuss a cut. Reports that sales have been made on a basis of \$15.50 for No. 2 foundry are vigorously denied, and it seems that things are about as they were a week ago. Some pretty good sales have been reported, but not of enough volume to "cut any ice." The low grades are hard to find, as the Steel Corporation has absorbed all that can be picked up just now.

The new furnaces at Thomas, for all three will be practically new when completed, will have the largest storage bins yet constructed in the district. They will be capable of holding as much as three or four weeks' supply of coke and ore, and render less troublesome possible shut-

down of mines for strikes or other causes.

The rolling mills will shut down in a few days for summer lay-off and repairs. While the mills are idle repairs and new work will be pushed at the Birmingham mill, where the Republic Company is preparing to install a spike-working machine.

Steel is in good demand, and the mill of the Tennessee Company at Easley is doing good work. The new machinery recently installed is working well. The blooming mill engine is 25,000 horsepower, and is the largest of its kind in the United States. It took ten cars and \$1000 freight to bring the big machine from Pittsburg to Birmingham. H. W. L.

**The Birmingham District.**

The Commercial Club of Birmingham has elected as officers: President, Fred M. Jackson; vice-presidents, F. Y. Anderson, Culpepper Exum, T. G. Bush, M. V. Joseph, J. C. Mahen, W. H. Kettig, Robert Jamison, S. E. Thompson, Louis Minor, R. M. Goddall, B. Steiner, J. B. Cobbs; secretary, J. B. Gibson; treasurer, Leo K. Steiner, and directors, B. F. Roden, A. D. Smith, Joseph Beitman, E. W. Barrett, G. H. Estes, J. J. Banks, John W. O'Neill, J. A. Rountree, T. H. Molton.

The report of Secretary Gibson submitted at the tenth annual meeting of the club last week showed that during the past twelve months companies doing business in the district had increased their capital by \$1,050,000; that eleven manufacturing companies with a capital of \$1,047,000, seventeen coal and mining companies with a capital of \$1,205,000, and 109 other companies with a capital of \$2,460,200, had been incorporated. During the year there were spent in equipping new mines, building coke ovens and furnaces and in improved appliances, etc., \$6,113,643; on municipal improvements, \$437,207; on railroad construction, \$1,163,000, and on new houses, \$4,289,975.

**PROGRESSIVE CLARKSBURG.****Sanitary Improvements in the West Virginia City.**

In a letter to the Manufacturers' Record Mayor Lafayette C. Crile of Clarksburg, W. Va., writes:

"From an industrial point of view West Virginia is most promising for the coming season. Every person who desires to work can find employment. The cities in this section of the State are undergoing modern improvements in every branch.

"I especially desire to call attention to the city of Clarksburg in the line of municipal improvement. We have let a contract for the building of a Dixon garbage crematory. This crematory is built by the Dixon Garbage Crematory Co. of Toledo, Ohio. This crematory is one of the most scientific concerns in the country, and goes a great way in solving the question of garbage disposal in the cities. When we get our crematory into operation we can make our city the most sanitary and healthful of any city in the State, which will be a great inducement for people to locate here and make this their permanent home.

"The water plant is under control and owned by the city, and furnishes water at an exceedingly low rate. The city council last year expended several thousands of dollars to increase the capacity of the water supply, and will spend several thousand more in erecting tanks, extending mains, etc., which will put our waterworks in excellent shape.

"Fuel and light is cheaper here than anywhere else that I know of, by reason of the fact that our coal and natural gas seems almost inexhaustible; in fact, I do not know of any place that offers better advantages to capital and labor than Clarksburg, W. Va."

**NEW ORLEANS' CONVENTIONS.****The City Benefited by Recent Gatherings There.**

Col. A. R. Blakely of New Orleans estimates that \$2,500,000 at least have been spent in that city as a direct outcome of conventions held there during the past six months. In an interview with the Daily States he said:

"As a business investment the conventions have been worth many times more than the most sanguine have believed unless stopping to count up the actual gains in dollars and cents. I believe that the Confederate veterans alone left in New Orleans fully \$1,000,000. I calculate that all the others must have left at least \$1,500,000. This is the direct cash result of the one campaign in securing conventions.

"Now from an advertising standpoint. The great possibilities and prospects and the present substantial basis of New Orleans has been brought to the attention of every class of business and professional people of this entire country. Advertising is something that pays, but it is also something that does not always bring direct results. But the good effects from the season of conventions will continue to be felt for the next five years, yes, for many times that length of time.

"We have had five big conventions here this month, beginning with the American Medical Association from the 4th to the 8th; the National Association of Police Chiefs from the 12th to the 14th; the National Association of Telegraph Superintendents from the 12th to the 15th; the reunion from the 19th to the 22d, and the Press Association, which closed last night. Perhaps no other city ever had so many important conventions in the same length of time. Then earlier we had the National Federation of Labor and many others. In fact, we have had so many conventions here this winter that not one man out of a hundred could correctly recall all of them.

"But we did not have a single convention that we did not have to get out and work for it. The manufacturers were captured by a determined campaign, and so was the reunion and the other conventions. But now that we have established a record as a convention city we will not have to go out and make the hard fights in the future that we have made in the past. Conventions will come in the future of their own accord, although we cannot have the number next year that we have had this, for the reason that we have had almost all of them this year.

"And another important thing to remember is, that it will not be necessary in the future to expend such large sums of money for the entertainment of conventions. This has been the experience of Kansas City, Detroit, Cleveland, Minneapolis and the other cities which have become convention cities. A boat ride on the river, a trolley ride or a reception is all the entertainment that is necessary. And the conventions go to those cities of their own volition as they will continue to come to New Orleans in the future.

"The modern convention of a profession or of a business class is just as much of a necessity now as the traveling man who made his advent about a quarter of a century ago. They are a necessity, and therefore it behooves a wide-awake city to get out and establish a reputation for being a good place in which to hold the annual meetings of all sorts of associations. We have established that reputation, and we can now, I think, easily maintain it through the Progressive Union, which has done more to advertise New Orleans than all the other agencies and mediums since the Civil War. Look at the other cities all about us. New Orleans is going ahead

at a more rapid pace than any of them, and I believe that this is due to the fact that the Progressive Union is in existence."

**Annual Meeting of the Baltimore Builders' Exchange.**

The fifteenth annual meeting of the Baltimore Builders' Exchange was held on Wednesday evening, with an unusually large number of members present. The following officers were elected: President, Mr. John H. Short; first vice-president, Mr. Joseph H. Hellen; second vice-president, Mr. John J. Kelly; third vice-president, Mr. Theodore Mottu; secretary, Mr. John M. Hering; treasurer, Mr. B. F. Bennett; directors, Messrs. Joseph T. Lawton, Frank P. Brady, George B. Roche, Charles F. Macklin, Harry L. Starr, D. A. Leonard, Walter E. Burnham, A. H. Clarke, S. H. Calkins, Theodore F. Krug, William C. Stewart and Harvey Middleton.

President Short was re-elected for the third term. His annual report was read, and proved very interesting. Of the city improvements the president dwelt at length, and submitted some valuable statistics. Of the improvements the president said:

"Our bulletins of contracts make an excellent showing for the past twelve months. The bona fide contracts of \$5000 and over for our city alone amount to \$5,000,000, and including government buildings and operations in adjacent towns in which our local contractors are interested, amount to \$8,000,000.

"Add to the above the blocks of residences and small improvements, and our city's building business for twelve months may be safely estimated at \$10,000,000.

"The prospect was never better than at the beginning of 1903, and although much building has been retarded, if not stopped entirely, by strikes and unreasonable labor demands, the outlook still encourages hope for another prosperous year."

**Cheap Fuel for Crowley.**

In a letter to the Manufacturers' Record Mr. Frank Randolph, secretary of the Crowley (La.) Progressive Union, writes:

"Crowley has recently experienced a remarkable business revival, and prospects for the coming season's rice crop are better than they have been at any other time at this season for many years. The development of the famous Mamou oil field, within a few miles of Crowley, and within the borders of Acadia parish, has been a great benefit to Crowley, and steps are now being taken to build a pipe line from the oil fields to this city. This will give Crowley cheap fuel, and will enable it to offer unusual inducements for the location here of new manufacturing enterprises. Another new railroad is also projected, and will probably be built within a few months."

**Working for Petersburg.**

The Petersburg (Va.) Chamber of Commerce, of which Mr. H. P. Stratton is president, has issued an address to the business men of the city for the encouragement of greater public spirit and the material development of the city. It calls attention to the improvements which have been made in recent years, new buildings going up, new industrial enterprises, paving of streets, extension of sewers, development of the Appomattox water-power, the healthy increase in the price of real estate and other indications of advancement, and urges talking and doing for Petersburg. The Chamber of Commerce will heartily give all the aid within its power to every business enterprise

## THE EAST COAST OF FLORIDA.

By ARTHUR S. MORTON.

[Written for the Manufacturers' Record.]

There are few States in all of our South-land where any one man has done so much for the public good as has Mr. Henry M. Flagler for Florida. It is true that his great operations have been confined to a certain portion or section of that State, but it is only by the concentration of energy and capital that great things can be accomplished. Appreciating this fact, Mr. Flagler fifteen years ago arranged a program of great enterprises, the rapid consummation of which has changed the map of East Florida and made famous that entire section of the State. In its entirety this program is not yet concluded, but has entered upon a scheme of perpetual extension the course of which contemplates yet greater achievements.

When Mr. Flagler came to Florida in the eighties the east coast of that State, with a water front of over 400 miles, reaching from Fernandina to the Keys, was but little known to the commercial world, and for the most part lay in endless stretches of forest and wild lands, while in the southernmost county few other than Indians roamed the forests or waded the slush of boundless everglades. St. Augustine, an old Spanish town of antiquities and a Mecca for the relic hunter, was the first object of Mr. Flagler's attention. To attract winter tourists there and keep them through the season, he proceeded to build a new town just outside the old one. In the fulfillment of this enterprise, rose the famous Ponce de Leon, a hotel of concrete without joint or break, a casting as with one mold, the most remarkable as it was the most elegant hotel of its day. Near it was also built the Alcazar and the Cordova, and around these the new city of hotels sprang up. The narrow-gauge railway to Jacksonville was broadened to the standard, and the branch line to Palatka was purchased. This gave Mr. Flagler an unbroken line to that point, from which he continued south through an almost uninhabited and totally undeveloped country to Ormond, where another winter resort hotel was built, and near which a village and other hotels soon sprang into existence. Daytona was next reached by the onward movement of the road, a place now regarded the most beautiful resort city in the South. At Rock Ledge, sixty-six miles further south, the road building stopped temporarily, while Mr. Flagler halted to look about him and make plans for the future.

It was believed that there that mysterious zone called "the frost line" had been safely passed, but as experience proved the contrary, Mr. Flagler determined to build further down the peninsula. He had heard of the beauties of Lake Worth, of the Gulf stream that washed the Atlantic shores near there, and of the perpetual summer its warm waters insured, so to explore this wondrous southland he organized an expedition, which in small boats set out for the cruise along the course of the famous Indian river. Near Jensen "a lift" was encountered, where the launches were carried across intervening land and again placed in the water. When they prospected Lake Worth Mr. Flagler saw what other before him had seen, but he comprehended what others had not. A long narrow strip of high land lay between the lake and the ocean, covered with the forest jungle of a tropical climate. This, to Mr. Flagler's mind, afforded opportunity for the highest exercise of landscape and engineering talent. He soon evolved the plans for what is now

Palm Beach and builded it upon this island—the most beautiful tourists' resort in the world. The establishment of Palm Beach determined the question of railroad extension, so from Rock Ledge through the wilderness the road was pushed 124 miles further south, reaching Palm Beach in 1894.

However, the hotel and landscape building did not wait for the railroad. That work was largely done ere the whistle of the locomotive was heard. The vast quantities of material used in the construction of the Royal Poinciana was boated down Indian river to "the lift," where it was placed on tram cars and ardently pushed by hand across intervening land, and then reloaded on boats, which finally delivered it to the carpenters at Palm Beach.

Such, in brief, is the history of the founding of Palm Beach, which has the distinction of superlatives over others of its kind—the most beautiful in the world, the most noted; avenues and promenades such as the world has never seen. Such are the expressions of the professional globe-trotters. Palm Beach has a hotel easily the largest on earth, the Royal Poinciana, with a frontage of 1000 feet, and if the new wing were extended to a straight line it would measure 1800 feet. It has two-thirds of an acre office space, nearly three miles of hallways and 1150 rooms. In rear of this mammoth establishment and facing the ocean is The Breakers, another hotel of immense proportions and of elegant appointment. Whitehall, Mr. Flagler's new home, is grander and more magnificent than perhaps any other private residence of the kind in this country. There clubhouses, villas, flower gardens, all in costly array.

As might have been expected, this lavish expenditure of millions has drawn about it the millionaires from many States, who vie with one another in the establishment of magnificent estates, thus helping Mr. Flagler make more beautiful what had already seemed perfect. Thus has been established a rich man's paradise, where hundreds of the immensely rich spend a part or all of each season. At one time during last winter there were seen in the parlors of the Poinciana a number of distinguished capitalists whose fortunes in the aggregate approached the thousand-million mark.

Across the lake on the main land is the cottage city of West Palm Beach, a city of 4000 souls, that has not as yet seen its tenth birthday. In 1894 it did not exist even in imagination, the land whereon it now stands being the property of a neighborhood farmer. During that year it sprang from the ground as a mushroom, but unlike it, to stay. The town grew rapidly into a city, and is even now experiencing a building boom that has been long on. During the summer of 1895 and winter of 1896 the railroad was pushed to a deep-water terminus on Biscayne bay, sixty-six miles further south, where Mr. Flagler built the Royal Palm, another magnificent hotel.

Adjacent to it is the city of Miami, the present terminus of the Florida East Coast Railway, and a port of entry. It is easily the most progressive, as it is also the youngest of all the new towns along the east coast, and is experiencing a rush along the line of substantial development that is astonishing. Though scarcely six years old, it has been incorporated as a city from the first, a feat performed by no other city in the State, others having been first incorporated as towns. Many

of the business and public buildings in Miami are built of white coralline stone, its streets and sidewalks are paved with the same, and its frame residences are painted in white to correspond, making it the whitest city in all Florida, immaculate to the eye. From this port Mr. Flagler operates his steamboat lines, reaching out to Key West, Havana and Nassau, where are located, at the latter place, two more mammoth Flagler hotels, the last of a system of hotels, steamboat and railway transportation reaching from Jacksonville to Havana and the Bahamas.

Along the railway line through the length of the entire State has taken place, and is yet in progress, a most wonderful development. Cities and towns along the route have risen from the forests, while groves, trucking lands and farm country under beautiful tillage spread back from the coast for many miles, where formerly naught else than wild lands had existed. The culture of pineapples, which as a crop had no existence before the railway, is now second only in commercial importance to the orange, which it is pushing hard for first place, while counties—notably Brevard and Dade—that ten years ago counted their population by hundreds, now number them by thousands. Old settlers there are remaining, while each season brings its quota of new ones. Enterprises of every description are being established, and there is a marked inflow of foreign capital, distributing generally throughout this entire section of the State.

Side by side with this wonderful growth has been a corresponding development of the material resources of all Dade county. The first settlers on the rich muck land traversed by the railroad were brought from Michigan by Major Boynton and given every assistance and encouragement by the railroad management. Their first crop was a failure. Then Mr. Flagler showed his faith in the country. He put his hand in his pocket and enabled the farmers to try again. Since then success has been the rule, failure the exception, and now every year sees carload after carload of early vegetables, pineapples and tropical fruits carried from a region that eight years ago was swamp, saw grass and pine woods. Taken from any standpoint, the course of development there during the past decade has been phenomenal. With all of his expenditure of millions on the east coast, Mr. Flagler has nowhere so lavished those millions as within the bounds of Dade county. This county forms the eastern half of the southern portion of the State, having a water length of about 150 miles and an average breadth of forty miles. When Mr. Flagler and his railroad came to Dade county in 1893-94, he found it a wilderness, with practically no white population and scarcely any valuable property interests. There was at Miami and one or two other points an Indian trading post. At Miami there were but two buildings, one an old stone fort, which yet stands, a grim reminder of the near ago. There were but eighty-five registered voters in Dade county then, scattered over a territory larger than the State of Delaware. With railway and water transportation in recent years the county is rapidly filling up. It is the field of Mr. Flagler's greatest achievements, past and present, the map upon which his future plans are taking shape. Within its territory is embraced the great wealth of Palm Beach and its environs and the cities of Miami and West Palm Beach, besides numerous small towns and villages and many hundreds of tillers of the soil. These last are developing the country even more markedly than is capital developing the towns, and from their great benefactor and friend they are receiving even now renewed assurances of

support, for while they are toiling on the new lands his corps of engineers are at work making a survey of the territory between Boynton and Little river, a distance of about forty miles, with a view to ascertain if it be feasible to drain the many thousand acres of prairie land lying in the territory referred to. If found practicable, it is his purpose to drain these lands so that there may be no danger of overflow or floods in the rainy season, thus bringing under cultivation a vast area of the best cropping lands. In further aid of farm development Mr. Flagler is now operating a large force of hands in the work of extending the railroad south of Miami to Cutler.

This extension will open up a rich vegetable and fruit-growing territory. He has recently returned from a prospecting tour to Cape Sable. What his intended improvement at that point may be is not yet given out, but the indications point to an extension of his road there, and the cliff lands and promontories of the cape afford opportunities that must be very tempting to the great hotel builder.

In his effort for a permanent deep-water harbor at Miami, Mr. Flagler has agreed to spend dollar for dollar with the federal government in improving Biscayne bay. A large appropriation has therefore been made by the latter to meet this agreement. In good faith Mr. Flagler has set his dredges to work, and is opening a deep channel ninety feet wide on the bottom and extending out from the piers a distance of three and one-half miles through the bay to the peninsula, where the government's work will carry the channel out to sea. This improvement, when completed, will make Miami the only deep-water port on the east coast of Florida, and will add greatly to her commercial importance and material growth. Other Dade county improvements of first importance are the fine roadways that are being built, notably the great turnpike from West Palm Beach to Miami, sixty-six miles. This road is, as are the others, laid in crushed coralline stone, which, after being rain-soaked and exposed to the atmosphere, becomes a cement and makes a most elegant roadbed—smooth, elastic, durable.

In addition to the public improvements already mentioned, there are to be very considerable additions to the hotels Royal Poinciana at Palm Beach and the Royal Palm at Miami. Both building enterprises will be pushed to completion this season, and involve the expenditure of many thousands in money, and will give employment to a large force of workmen.

Taken collectively and individually, Mr. Flagler's enterprises have, of course, redounded to his own weal, but they have at the same time benefited hundreds of thousands of others. In a broad sense he has been a public benefactor to Florida. He has disseminated capital and employed labor with an unstinted hand, and has done for the State what no other man or group of men within its borders would or could have done. Mr. Flagler does not Carnegie his gifts or acts of public munificence by compelling others to share in the expense of maintaining a gift of questionable benefit, but bears the total cost himself, and those who follow his lead help themselves most by helping him in his great enterprises and schemes for the development of the State of his adoption.

It is announced that Prof. Charles H. Herty, who has done such practical work for the development of economic methods of handling pine forests in Georgia and Florida, will spend some time in Southern France as an agent of the government familiarizing himself with the forestry methods there.



## TASKS OF YOUNG MEN OF THE SOUTH.\*

By RICHARD H. EDMONDS.

It seems to have become the fashion for many of our Southern writers and speakers to fall in with the sentiment so industriously cultivated in other sections about the Old South. We are told that the New South is a new creation altogether different from the Old South, and that it is largely the product of outside energy and capital. We have heard these things until, verily, we almost believe them ourselves. No wonder, then, that the outside world accepts them as true, for have they not the testimony of some of our own speakers and writers? Such teachings are unjust to the Old South. They are false to its true history. More than that, these teachings are not alone false to the Old South; they are false to the present and to the future. What the people of the South have done since 1865, and what they can do in the future, can only be rightly measured when we have gained the proper perspective. That we can get only when we understand the Old South. Were the men of the Old South such that their descendants should be inheritors of a strength and force of character sufficient to enable them to grapple with the problems of world-affairs in business and to meet in competition the industrial and financial giants of the day? Or are we of the South born of a race who did not measure up to the broadest grasp of material potentialities? These questions affect the very foundation of the South's life. For, great as are her natural resources, men, real men, count for more than iron or coal or cotton or timber. It is as true today as when Lord Macaulay spoke it.

"It is not," said he, "on the fertility of the soil, it is not on the mildness of the atmosphere, that the prosperity of nations chiefly depends. Slavery and superstition can make Campania a land of beggars, and can change the plain of Enna into a desert. Nor is it beyond the power of human intelligence and energy, developed by civil and spiritual freedom, to turn sterile rocks and pestilential marshes into cities and gardens."

The South has a fertile soil, a genial climate, exhaustless stores of mineral wealth, but these will count for little unless it has an inheritance of character strong of fiber, fine of texture, broad of grasp, which could, if need be, turn sterile rocks and pestilential marshes into rich cities and thriving farms. If our Southern people have such a character, no man can fully tell the story of what the coming years will show of material prosperity; and material prosperity, if not the foundation, is at least an essential factor in ethical advancement. They who preach the gospel of industrial upbuilding for the South, the gospel of employment for the people, are really preaching the gospel of education. Yea, they are really the messengers preparing the way for religious advancement itself. It is true that "man cannot live by bread alone," yet he must have bread as the starting-point for ethical as well as for physical growth. In a recent address on "The Economic Interpretation of History," Professor Seligman said:

"With every improvement in the material condition of the great mass of the population there will be an opportunity for the unfolding of a higher moral life, but not until the economic conditions of society become far more ideal will the ethical development of the individual have a free field for limitless progress."

"The ethical ideals of the community, which can alone bring about any lasting advance in civilization, have been erected on and rendered possible by the solid foundations of material prosperity."

Let us study the South, then, from the material side, with special reference to industrial interests, past and future. What of the Old South from this viewpoint? We know that it produced statesmen and warriors; we know that in Washington and Jefferson and Madison, and Marshall, and Lee, and Jackson and a mighty host of others, it has given its full share of the world's great leaders in statecraft and war. On that side the Old South made a record unmatched by any other section. But what did we do in producing business leaders? For since the day when it was decreed that in the sweat of his brow man should earn his daily bread, man's greatest blessing has been work, and those who have led in creating work by developing new industries should rank among mankind's greatest benefactors. We honor the victors in battle, and crown with praise those who have been most successful in applying the art of destroying human life. How much greater should be the honor given to those who, marshaling financial and engineering forces, open our coal mines, build our mills and light our furnace fires! How much greater honor should we pay to those who have learned how to upbuild rather than to destroy, how to create cities rather than to conquer cities, how to expand and ennoble human life by touching it with the quickening wand of profitable employment, rather than wreck and ruin it by the arts of war! Civilization is not based on physical force, but largely on commerce and trade. They have ever been the ruling factors in the world's affairs, and their advancement has always been marked by the advancement of mankind. Frederic Emory, in a recent article on America's progress, said:

"At all periods of the world's history the nations having the greatest material prosperity have been the most advanced in the politer arts, and if we may judge from the rapid multiplication in recent years of institutions of higher learning, of art museums, of scientific collections, our growth in wealth is accompanied by a corresponding beneficence in its use." He also quotes Frederic Harrison in a magazine article, in which Chicago was used as an illustration of educational and artistic progress following business prosperity, as saying:

"In Chicago I heard of nothing but the progress of education, university endowments, people's institutes, libraries, museums, art schools, workmen's model dwellings and farms, literary culture and scientific foundations. I saw there one of the best equipped and most vigorous art schools in America, one of the best Toynbee Hall settlements in the world, and perhaps the most rapidly-developed university in existence. The impression left on my mind was that the citizens of Chicago were bringing their extraordinary enterprise to bear quite as much on social, intellectual and artistic interests as they confessedly do on grain, ham, steel and lumber."

Sometimes we have been too prone to sermonize against the spirit of "commercialism," forgetting that it is the unceasing, untiring commercial energy of the American people which has put this country to the forefront not only in finance,

trade and manufactures, but in almost everything which looks to the betterment of mankind.

Notwithstanding the widespread opinion to the contrary—an opinion held somewhat largely in the South as well as in the North—"there were giants" in business thought and activity in this section in the olden times. Go back to colonial days, and you will find that industrial interests claimed the active attention of the foremost men of the times. Washington's father and his brother were largely interested in ironmaking; Washington himself was a civil engineer; Jefferson operated nail works; Governor Spotswood was an ironmaker. Swank in his "History of Iron in all Ages" pays a high tribute to the genius of the pioneer iron men of the Southern colonies, and, referring to the establishment of many iron works by the first settlers in Maryland, Virginia, the Carolinas, Tennessee, Alabama and Georgia, says:

"The people who built these furnaces and bloomeries were not only bold and enterprising, but they appear to have been born with a genius for making iron. Wherever they went they seem to have searched for iron ore, and having found it, their small charcoal furnaces and bloomeries soon followed. No States in the Union have shown in their early history more intelligent appreciation of the value of an iron industry than North Carolina and Tennessee, and none have been more prompt to establish it."

And elsewhere he refers to the "daring men who pushed their way into the wilds of Western Carolina and East Tennessee in the last century and set up their small furnaces and bloomeries, when forts took the place of hamlets."

"No State in the Union," says he, "gave more attention to domestic manufactures at the close of the Revolution than Virginia. Richmond, Lynchburg, Staunton, Winchester and some other places became noted for the extent and variety of their manufactures."

But with the invention of the cotton gin there was opened to the South, through the development of a great cotton industry, a more profitable field for capital and energy than any section of this country had ever known. The world-hunger for cotton was so great that for forty years the average price was seventeen cents a pound. Naturally, the South bent its energies to the extension of an industry yielding such large profits. In this it displayed equally as much energy and business ability as New England put forth in the upbuilding of its manufactures. But in 1842-43 the price of cotton declined, and then the South with equal energy turned to industrial pursuits, to the building of railroads, and to many broad national undertakings looking to the extension of commerce. There is scarcely an important railroad in the South today which was not outlined prior to 1860. Between 1837 and 1857 a dozen or more industrial conventions were held to focus public interest upon such projected lines as one from New Orleans to Washington and one from Charleston to Cincinnati in order to make Charleston a foreign outlet for the grain and provisions of the West. These conventions sought also to stimulate the organization of companies to build a road to the Pacific coast, and one to establish steamship lines to Europe, the first steamer which ever crossed the Atlantic having started from a Southern port—Savannah. The South did not exhaust its energies in talking about undertakings of this kind; it carried many of them to success, and today we are but taking up the unfinished work of the Old South so rudely interrupted by the shock of war.

Between 1850 and 1860 the South built 7562 miles of railroad, against 4712 miles built by the New England and Middle States combined. In 1850 the South had 2335 miles of railroad, and the New England and Middle States 4798; by 1860 the South had increased its mileage to 9897, quadrupling the figures of 1850, while the New England and Middle States had increased to 9510 miles, or a gain of only about 100 per cent. This activity in railroad construction was not confined to any one State, but covered the whole South, and every State made a rapid increase in its mileage. In Virginia there was an increase from 515 miles in 1850 to 1771 miles in 1860; in North Carolina the increase was from 248 miles to 880 miles, in South Carolina from 289 to 998, in Georgia from 643 to 1404, Florida from 21 to 401, Alabama from 132 to 743, Mississippi from 75 to 872, Louisiana from 79 to 334, Kentucky from 78 to 769, and Maryland from 253 to 380. In 1850 neither Texas, Arkansas nor Tennessee had a single mile of railroad, but in 1860 Tennessee had 1197 miles, while Texas had 306 and Arkansas 38. The activity in railroad construction in the South was but typical of the activity in industrial development. In iron works and the manufacture of steam engines and machinery, in cotton mills and in lumber, the increase between 1850 and 1860 was proportionately larger than in the rest of the country, and the total number of factories in the South at that period was 24,590, with an aggregate capital of \$175,000,000.

While giving its attention, as these facts indicate, to the development of railroad and industrial interests, as the South did between 1850 and 1860, the advance made in agriculture is most astonishing. Not only did it produce all the cotton, rice and sugar raised in the United States, but in 1860 it raised 358,000,000 bushels of corn, or 44 per cent. of the total crop of the country; 351,500,000 pounds of tobacco, against 77,800,000 pounds in the rest of the country, and 38,600,000 bushels of sweet potatoes out of a total crop of 41,600,000 bushels. It had over 40 per cent. of the total value of live-stock, and the cash value of its farms was more than one-third of the total farm values of the United States. It had over 40 per cent. of the value of agricultural implements, and of the total assessed value of property in the United States of \$12,000,000,000, 44 per cent., or \$5,200,000,000, was the South's proportion. No higher testimony to the business ability in agriculture, in railroad and industrial pursuits, need be given than these figures. There were, indeed, giants in those days—men who in broad grasp of world-affairs, in scientific attainments and far-seeing business judgment proved their right to rank with the foremost men which America has produced. Matthew F. Maury, acknowledged the greatest scientist of the sea which the world had ever known—the man who marked its currents as the civil engineer might mark out the line of a railroad, who laid the foundation for our weather bureau, who in 1849 made the most brilliant report on the need and the value of an isthmian canal ever written—was a Southern man. The opening of the wheat fields of the West, enabling us to feed Europe—one of the most wide-reaching commercial revolutions of the last century—was made possible in part by the McCormick reaper, and McCormick was a Southern man. The cotton gin, about whose origin there has been much dispute, was invented by a Southern man and perfected by a New Englander. In proportion to white population, the number

\*An address at the Commencement of the Mississippi Agricultural and Mechanical College, June 2.

of patents granted to Southerners from the date of the establishment of the Patent Office to 1860 was almost as great as to the rest of the country, notwithstanding the fact that from 1800 to 1842-43 the South's energy was so largely centered in agriculture. The "winning of the West" was largely the work of Southern men. In 1860 over 950,000 Southern-born whites were living elsewhere than in their native land. They had crossed the mountain trails of Virginia, they had followed Boone over Cumberland Gap, they had shoved their way into the far North, they had settled Kentucky, and then passed on to Ohio, Indiana, Missouri and Iowa and the Pacific coast, all of which had felt in agriculture, in trade, in the arts and in the professions the impress of their virility. At that time there were only 7,000,000 Southern-born whites living, and of these, nearly 14 per cent, were giving their energy to the development of other sections. As against the 950,000 Southerners living elsewhere in 1860, the South had only 250,000 whites drawn from other sections.

The South, in a spirit of patriotism broader than has ever been exhibited elsewhere in this or in any other land, gave to the United States the vast empire of more than 250,000 square miles known as the northwest territory, and it was under Southern initiative and Southern leadership that the boundaries of the country were extended to the Gulf in the acquisition of Florida and to the Pacific in the Louisiana purchase and the additions of territory consequent upon Texas annexation and the Mexican War. Between the Revolution and 1860 more than 2,000,000 square miles were added to the area of the United States under Southern auspices. No narrow provincialism, no sectionalism cramped the spirit of the South or weakened its interest in the broad questions of national advancement—questions involving material advancement as well as territorial expansion.

Facts like these could be presented almost without number. Every schoolboy should know them, and yet again and again have we been told that the Old South lacked enterprise; and that it did not produce broad men of virile grasp of business problems. What Southern school has ever made a part of its curriculum the training of its students into a full knowledge of what the Old South accomplished, that they might thus catch a new inspiration to prove themselves worthy sons of such worthy sires? In that we have failed to do this, have we not deserved to be misunderstood and misrepresented?

Let us, though, turn from the past and look to the future. Let us look beyond the boundary lines of the South and take a wide survey of our country and its future. Let us with just pride in what the South has done and what it is now doing, take equal pride in the progress which has made the United States the richest and most powerful nation of earth, in comparison with which the mighty nations of ancient days seem but pigmies. It is our country. In its making, in peace and war, no section can claim a larger share than the South. Its future is the South's future. In its advance in power and wealth and ethical development, the South must yet hold the forefront. In this Southern country nature has filled her storehouse to its fullest limit with the things out of which employment and wealth are created. Here, too, has been planted a dominant people of unmixed blood—the purest of the so-called Anglo-Saxon race in America—with all the inherent strength and force of the Anglo-Saxon character. For nearly forty years we have been wandering in the wilderness, but at last we are coming into the promised land, where the pulse stirs with new life and the heart quickens with new aspirations as we see that our labor is no longer in vain. No longer are we "leading a forlorn hope." That may be heroic, but human nature taught by Divinity itself seeks a reward for all its labors, and the South's reward is coming apace. Its progress in industry and commerce and agriculture keeps step with the amazing progress of the country. Its timber, its coal and iron, its water-powers, its soil and its climate are being made to yield a rich harvest of prosperity. Twenty years ago we were still in the deep poverty which followed the wreck and ruin of our old civilization, still harassed by the unsolved and apparently unsolvable problem of a corruptible suffrage—the curse alike of the white man and the negro. These issues the South has met. After the long weary night in the wilderness, the day has dawned. Though we could see no pillar of fire to guide us through its darkness, and though we stumbled often, our march has been onward and upward. We are out of the wilderness of despair, out of the valley of desolation, and as we near the mountain tops and look back over our path, we may well rejoice over what has been accomplished.

Today we are on even marching ground with the whole country, and its progress will be the South's progress. What of the future of our common country, do you ask? Attempt to forecast it, and you are staggered. Judge it by the light of the past, and the imagination is overpowered. In 1880 the United States had 50,000,000 inhabitants; we now have 80,000,000, and ten years hence we shall have very nearly, if not quite, 100,000,000. The potentiality of these 100,000,000 will not simply be double that of the 50,000,000 in 1880. In productive power, in the magnitude of financial and commercial operations, each unit in 1912 will represent more than double the capacity of each in 1880. Measured in this way, our population ten years hence will have a potentiality equal to what 200,000,000 would have had in 1880. The steam engine represents the power which has made this change. In the machine age in which we are living, progress is so rapid that we can scarcely keep track of it. Labor-saving machinery, where one man does the work of a hundred, electric energy, electric light, the telephone, the railroad—all of which have reached their present development during less than a quarter of a century—have wrought a revolution in human affairs, and still we seem to be only at the beginning. While they have vastly increased our productive power, they have to a still greater extent increased the demand for labor and the opportunity for employment. Throughout our entire land there is a cry for men. The grain fields of the West, the cotton fields of the South, the coal mines and the iron mines of the North and South alike, are begging for laborers, while the opportunities for the man of skilled brain or muscle seem to be without limit. In 1880 the United States made 3,800,000 tons of pig-iron; now we are making at the rate of nearly 20,000,000 tons. Then we mined 42,000,000 tons of bituminous coal; last year we mined 254,000,000 tons, and ten years hence, if railroad facilities can be provided rapidly enough to handle it, we shall be mining at the rate of 500,000,000 tons a year. Then we had 92,000 miles of railroad, mostly laid with light rails; now we have over 200,000 miles, and largely of heavy rails. In the last seven years the railroad traffic of the country has doubled,

and nearly every railroad is burdened with more freight than it can handle. Traffic is growing faster than locomotives and cars can be built, faster than new roads can be constructed and old roads improved, faster than the imagination of the enthusiast could have foreseen five years ago. We can already see business enough ahead to know that within a comparatively few years the carrying capacity of our 200,000 miles of road must, by improvements to old roads and by the building of new roads, be more than doubled. Nearly every line must be double-tracked, thousands of new miles must be laid, and equipment be largely increased. The inter-urban electric road—a new factor in human affairs—now commanding wide attention, will soon have stretched over thousands of miles, and made both farm and city life more attractive by increasing the means of quick travel from one to the other. Instead of injuring the steam roads, the electric line will benefit them by developing the country, and thus it will add to the business of the steam roads.

In 1800 the total value of our manufactured products was \$9,000,000,000, and of our agricultural products \$3,000,000,000; now we are turning out \$15,000,000,000 of manufactured products and \$5,000,000,000 of agricultural products, a total of \$20,000,000,000 a year, against \$12,000,000,000 a year then. Out of waste products, so-called but a few years ago, scientists have taught us how to create wealth. The almost neglected cottonseed of twenty years ago, often a nuisance to the farmer, with only forty oil mills then in operation, is now the basis of an industry employing over 700 mills and yielding \$125,000,000 a year of products. The waste pine slabs, tree tops and shavings of our lumbering operations, by the teachings of science, are becoming the foundation of new industries yielding turpentine and kindred products and also paper. Once petroleum as it came from Mother Earth was simply petroleum, good only when refined for illuminating purposes; now it is the basis for the manufacture of over one hundred different articles. More wealth is created out of the by-products than out of the illuminating oil. Armour once boasted that a chemist had taught him how to make more millions out of what had been wasted than what the packers had been using, "until now," he said, "we utilize every particle of the hog except the squeal, and some day we hope to catch that and turn it to good account."

What we have done in the development of industry, in domestic and foreign trade, in the saving of by-products by the skill of the expert, is but a beginning. We have simply laid a good foundation for our industrial structure. We have only opened here and there enough ore and coal mines to prove what we possess. We have become a world-power, not by virtue of Manila and Santiago, but by virtue of the fact that we have become the leading power in agriculture, in industry and in wealth. Midway between Europe and Asia stands this, the most richly-endowed continent of earth. With a population of 80,000,000 active, virile people, unvexed by the arbitrary laws of differing nationalities as in Europe, the foremost in general education, the foremost in wealth, the foremost alike in manufactures and agriculture of all the nations of the world, man never before conceived of such possibilities as the future holds out to us. Well may the people of the South rejoice that it is in their power to make this section hold a dominating position in this, the dominant power of the world. As nature has more richly endowed the United States than any other country, so it has more richly endowed the South than any other section of this country. Its combination of cotton and iron and coal and timber, of soil and climate, has no rival. Nature has done more than her share. She has covered our mountains and our valleys with timber; she has burdened our hillsides with mineral wealth beyond the power of imagination; she has given us coal and iron and cotton and oil, marbles and granites and clays; she has furnished us a variety of soils, which, according to their kind, need but to be "tickled with the hoe to laugh with the harvest" of cotton or grain or sugar or rice or fruits. Earth has no duplicate of the wealth of nature's bounty to us, but great as is the wealth of all of our unmeasured raw materials, it is in value but as a grain of sand upon the seashore compared simply with the economic value of our boys and girls. They are our greatest raw material. Our schools, especially the manual and technological schools, are to be the factories where the teacher as the skilled artisan takes these boys and girls as the raw material and turns out the most priceless product of earth—men and women equipped to develop every latent power to the blessing of the world and to their own happiness. Henceforth the destiny of the South is to be in the hands of the boys who, trained in its technical schools, shall be the leaders in the industrial upbuilding of this heaven-favored land.

The Old South did well its work. It developed men great in business, great in science, in statecraft and war. More than this, it developed men and women whose virtues have forever enshrined in our hearts the memories of the social life of antebellum days. The New South is the child of the Old South, and what it has accomplished since 1865 proves that the men and women who have done this inherited the strength of character and the love of virtue which make a nation great. The New South is not the product of outside energy and capital; they have contributed much to its advancement, and the South may well give them full praise, but it should rightly demand the world's recognition for its own work. We have in the South 750,000 people born elsewhere, but there are 1,500,000 Southern-born whites living outside of the South. We have given to other sections twice what we have received from them. Two stages in the South's history have passed. And now upon the boys of today must rest the responsibility of the South's future. There is an opportunity such as their fathers never knew. Facing the awful wreck and ruin of war, with loved ones given as a sacrifice to the cause which their death made forever sacred, the men and women of 1865 had to meet conditions which called for heroism as great as was ever seen between Bull Run and Appomattox. Greater in defeat than in victory, greater at Lexington than at Chancellorsville, was Lee, the kingliest man of all the ages. He typified the South. Accepting defeat on the battlefield as the will of that Providence which guides all human affairs, though feeling that it is, indeed, true that "God moves in a mysterious way His wonders to perform," the people of the South have out of that defeat won a greater victory than ever crowned their battle-flags between 1860 and 1865. Heroic has been the struggle. The South of 1865 was a land of desolation. From the Potomac to the Rio Grande stalked poverty and despair. Alike in city and country, ruin and misery were everywhere. Reconstruction's fearful curse and a disorganized labor system added to our burdens. Without capital or industrial equipment, discredited at home and abroad, the South faced the future with the same unquenchable spirit which had marked the



struggles of its tattered and footsore soldiers. Laboring under these adverse conditions, the South had to meet the competition of the North and West, flushed as they were with unprecedented prosperity. But, strange to say, eternal proof of the stuff of which this people is made, the South has kept even step in industrial and railroad advancement with the North and West. It is now coming to set the pace. It has demonstrated to the final conclusion and its acceptance by the world that here will be the future situs of cotton-manufacturing, and that in this section there will be created a cotton-mill industry rivaling that of the world at present. Since 1880 we have increased our coal production from 6,000,000 tons to over 60,000,000 tons, though we have only opened a small mine here and there when compared with the extent of territory and of wealth of coal in the great coal area of the South; we are mining 50 per cent. more bituminous coal than the United States mined as late as 1880; we have increased our iron output from 390,000 tons to over 3,000,000 tons, and this year our iron output will be four times that of the United States in 1860, and nearly as much as that of the United States in 1880; we have increased our oil production from less than 200,000 barrels to over 20,000,000 barrels a year. In place of the 20,000 miles of poorly-equipped railroads, we now have nearly 60,000 miles, with many compact, well-managed systems ranking with the best in the world. Against the poverty, the inexperience, the discredit and doubt at home and abroad of ourselves and our section of 1880, the South, thrilled with energy and hope, stands today recognized by the world as that section which of all others in this country or elsewhere has the greatest potentialities for the creation of wealth and the profitable employment of its people.

If their fathers and mothers have done this, what may not the boys and girls of this generation accomplish? Broad is the field for their activities. Favored above all other lands is the Sunny South of which we boast. Its fertile fields and its genial climate, its wealth of cotton, of coal and iron, its marbles, its granites, its timbers and its oil tell of heaven's benediction, but they tell us, too, that "to whom much has been given, of him shall much be required." Every natural advantage, like the buried talent, is but a curse unless we utilize it. Not of natural advantages should we boast—they are heaven's blessings, for which we should reverently praise the Giver of every good and perfect gift—but our boasting should be that we are taking these latent blessings and turning them into active power for the betterment of mankind and the enrichment of the world. Every mine opened, every mill built, every furnace fire lighted is a creation of employment for labor, and greater than he who can make two blades of grass to grow where only one grew before is he who can create employment where there was none before. To you, young men, the South commits its future, and it will hold you responsible for the fullest utilization of the talents entrusted to your keeping.

I have urged upon you material things as the foundation for all advancement. I have bid you work for material prosperity, for the upbuilding of the factories and the farms of the South. I have sought to impress upon you the unlimited opportunities which the potentialities of this section offer you, and I trust that in these material affairs you may display such ability and energy as to give to this section the foremost position in industry and wealth. But think not that material upbuilding must be the sum of your activities; think not that success in life is to be measured only by your bank account. Never let it be said that in the struggle for industrial advancement the South has lost aught of the virtues, domestic and public, aught of the manliness and self-reliance, aught of the charms of her women and the honor of her men which hallow the memory of the Old South. Build your factories, open your mines, let the hum of contented industry be heard throughout this land, but while building your country, build your character. Build it for time and for eternity. Hold virtue and honor above all price. With the poet say unto your soul:

"Build thee more stately mansions, O my soul!  
As the swift seasons roll!  
Leave thy low-vaulted past,  
Let each new temple nobler than the last  
Shut thee from heaven with a dome more vast,  
Till thou at length art free,  
Leaving thine outgrown shell by life's unresting sea."

### Water-Works in Small Cities.

Throughout the South there are a number of prosperous little cities and towns without the protection of water-works and fire departments. When such communities are visited by disastrous fires they are generally induced to build modern systems of water supply. But why wait for an expensive lesson? There are in but few cases valid reasons why even the smallest communities should be lacking in proper water supply and a competent fire department. Modern engineering has so perfected the ways and means of obtaining and distributing pure water for public and private use that no taxpaying community will find the cost of such a system prohibitive.

An expensive lesson was given at Louisville, N. C., where, last month, fire destroyed a number of business buildings and residences, the loss being \$40,000, while the insurance was but \$15,000. Doubtless the limited amount of insurance in force was largely the result of high rates charged by insurance companies because of the town's lack of such an important public service as a water supply and the means of using it against fire. A reasonable amount of money would

have paid for an equipment thoroughly adapted to the needs of a town of that size. By having water-works towns gain the advantage of decreased insurance rates, not to speak of the sense of security which the protection necessarily gives to the inhabitants. But not least of all the advantages is pure water, which is now generally conceded by the best authorities to be a greater influence for healthful communities than any other public convenience, with the single exception of sewerage, that could be mentioned.

It is not to be concluded from these statements that the South has not been progressive in this matter of building water-works. For this section has been alive always to the importance of the question. During the past six months or more the issuance of bonds, or taxation in other forms, arranged to pay for the construction of these public utilities has been especially noticeable in Southern municipal growth. But there are many communities that have not as yet considered the subject, and will not until an unexpected fire works havoc with their buildings. It is to such communities that a timely and thoughtful consideration of taking action in this direction is suggested.

## TEXTILES.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

### Estimated Cotton Acreage.

Based upon 3030 letters to banks, bankers, cotton commission merchants and responsible planters embracing every cotton-growing county in the South of the average date of May 22, Messrs. Latham, Alexander & Co. of New York estimate an increase of cotton acreage in the United States for 1903 at 737,878 acres more than last year, and the average planting of the crop at about fifteen days later than the normal. Their estimate by States is as follows:

State.	Acreage 1902.	Acreage 1903.
Alabama.....	3,501,737	3,589,280
Arkansas and Missouri...	1,961,627	2,020,476
Florida.....	253,286	257,085
Georgia.....	3,862,439	3,958,369
Louisiana.....	1,617,678	1,658,120
Mississippi.....	3,181,498	3,245,936
North Carolina and Va....	1,113,315	1,157,848
South Carolina.....	2,205,969	2,294,145
Tennessee.....	754,811	792,552
Texas and Various.....	8,661,893	8,878,440
Totals.....	27,114,103	27,851,981

### A Proposed Consolidation.

The Emporia Land & Improvement Co. and the Matoaca Manufacturing Co. of Petersburg, Va., have merged and incorporated under the title Virginia Consolidated Milling Co., with capital stock of \$1,000,000. Augustus Wright is president; Charles Hall Davis, secretary, and E. A. Hartley, treasurer and general manager. Messrs. Wright, Davis, Hartley, Geo. E. Fisher of New York and Philip Rogers of Virginia, are the directors. The Emporia Company was mentioned last week as having bought the Ettrick plant of 9184 spindles and 262 looms. The Matoaca plant has 10,512 spindles and 330 looms. The new company proposes consolidating all the cotton mills at and near Petersburg, as well as some other mills. Arrangements to this end are now in progress.

### The Cotton Movement.

In his report for May 29 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 271 days of the present season was 10,344,022 bales, an increase over the same period last year of 359,183 bales; the exports were 6,425,882 bales, an increase of 245,871 bales; takings by Northern spinners 2,013,485, a decrease of 13,986 bales; by Southern spinners 1,715,780 bales, an increase of 192,124 bales.

### Textile Notes.

Enterprise Mills of Kings Mountain, N. C., will erect an additional building 75x100 feet in size and install 2400 spindles and complement of cards, frames, etc.

A movement is on foot at Newton, N. C., for the organization of a cotton-mill company. Local investors are investigating with a view to making a decision.

The Anchor Cotton Mills of Rome, Ga., will increase capital stock from \$75,000 to \$150,000 for the purpose of making enlargements; company now has 7000 spindles and about 210 looms.

Northern capitalists and investors of Emporia, Va., will build a cotton mill at Emporia. They have secured a site and engaged engineers to plan the development of water-power. The names of the

interested parties have not been announced as yet.

Messrs. T. M. Stroud, H. C. Ballew and W. B. Barnes of Corsicana, Texas, have incorporated T. M. Stroud Manufacturing Co. for manufacturing cotton and woolen goods. The capital stock is \$25,000.

Messrs. P. W. Hart and P. H. Walker of Flat Rock, N. C., and F. G. Hart of Flat Rock, N. C., have incorporated the Hart Knitting Mill Co., with capital stock of \$50,000, of which \$6000 has been subscribed.

Oakdale Cotton Mills of Jamestown, N. C., will increase its capital stock from \$50,000 to \$100,000. Doubtless this action will be followed by enlargements to the plant. There are now 5328 spindles in position, manufacturing yarns.

Messrs. Joseph E. Patchet, F. M. Reynolds and E. B. Reynolds of Keyser, W. Va.; T. G. Powell of Cumberland, Md., and William Gund of New Creek, W. Va., have incorporated the Patchett Worsted Co. for manufacturing worsteds, etc. Capital stock is \$100,000.

Oxford Knitting Mills, Barnesville, Ga., will increase capital by \$50,000 and double present plant, which has forty knitting machines, etc. Contracts have been awarded for the additional machinery and for building materials. Stockholders of the J. C. Collier Co. take all the new stock of the Oxford company.

Pelham (Ga.) Manufacturing Co. has let contract to O. A. Robbins of Charlotte, N. C., to furnish machinery for its dyeing and finishing plant mentioned last week as to be added. Contract has also been let for erection of buildings. About \$10,000 in all will be expended. The plant will have capacity of 6000 pounds per day, two dip direct colors for denims.

The Graniteville Manufacturing Co. of Graniteville, S. C., has sold some 400 bales of cotton, realizing a profit of about \$30,000, and will close its mill for the next two months. This is done because of the high prices prevailing for the staple. There are ample goods on hand to meet the demands of regular customers, so that the company will not lose any of its valuable trade.

Announcement was made last week that B. Frank Mebane and associates of Spray, N. C., had purchased 4000 acres of land and begun to burn bricks for structures to be built for textile manufacturing purposes. Rumors have since become current that Messrs. Fred Victor & Achelis, the commission firm of New York, represent the German capitalists said to be interested, and that Messrs. Ladshaw & Ladshaw of Spartanburg, S. C., will prepare plans and specifications for the buildings. Mr. Mebane and associates already have cotton and woolen mills capitalized at more than \$500,000 and extensive water-power properties at Spray.

### Mississippi Business Men.

The Business Men's League of Mississippi was organized last week at Meridian in a convention of commercial clubs of the State. The officers are J. L. McKee of Meridian, president; D. M. Mayers of Hattiesburg, secretary and treasurer; H. E. Walker of Corinth; B. W. Griffith of Vicksburg; Harvey McAllum of Laurel and J. M. Buckley of Enterprise, vice-presidents. Among the speakers at the convention were Governor Longino of Mississippi and Mr. M. V. Richards, land and industrial agent of the Southern Railway.

A movement is on foot for the organization of a Maryland Board of Trade representative of commercial bodies in the leading cities and towns.

## RAILROADS.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

### AUSTIN TO SEGUIN.

#### Plan to Build a Railroad via Lockhart and Staples.

The Staples Mercantile Co., T. L. Griffin, president and manager, writes the Manufacturers' Record from Staples, Texas, as follows:

"We are very much in need of a road, electric or steam, through this section, and are preparing to organize a stock company. We would like to correspond with parties interested in building roads. The line we suggest passes through one of the most fertile valleys in Texas. Nearly all land is in the highest state of cultivation, and a great part of the valley can be irrigated. Land is worth from \$40 to \$100 per acre.

"We have a gin, water and light plant at this place valued at \$30,000. We gin from 3000 to 3500 bales of cotton per season, and the merchants do an annual business of about \$100,000. From San Marcos to Staples, ten and one-half miles, there are six large water gins and mills, and all do a good business. A road from Austin to Seguin via Lockhart and Staples would be a profitable line or a good feeder for the International & Great Northern, the Missouri, Kansas & Texas or the Southern Pacific. We will make it interesting to anyone who will build this line."

B. J. Butler also writes from Staples concerning the same project. He says: "The line we would suggest should run from Seguin, Guadalupe county, to Lockhart, Caldwell county, thirty to thirty-five miles. This would pass through the center of a fertile agricultural territory. For the conveyance of freight and passenger traffic, a line from Seguin to Lockhart via Staples, we believe, would be an excellent investment."

If continued to Austin, such a line would be sixty or sixty-five miles long.

### 'FRISCO'S GREAT PLANS.

#### Southern Railway and Rock Island to Join in Work at New Orleans.

According to advices from New Orleans and New York, arrangements are being made between the St. Louis & San Francisco Railroad, the Gould system and the Illinois Central Railroad by which the 'Frisco will secure entrance to New Orleans over the tracks of the Illinois Central and Texas & Pacific, instead of being obliged to build its own line from Memphis to the Crescent City. This, it is said, is in harmony with the policy which will enable the Illinois Central to enter the Birmingham district over the 'Frisco lines. Simultaneously with this information comes the report from Memphis that the 'Frisco has stopped work on its engineering plans for going south from that city.

The reason for this latest move is said to be a desire on the part of the large railroad interests to avoid overbuilding, the Illinois Central now being engaged in completing double-tracking on its line to New Orleans, while the Missouri Pacific is building another road on the west side of the Mississippi river. Should the 'Frisco go ahead with its plans, there would be a third line between Memphis and New Orleans, which, it is stated, the railroad companies consider unnecessary; hence the negotiations looking to abandonment of the 'Frisco's plans.

Furthermore, the 'Frisco is reported to have bought at New Orleans 3300 acres of land for terminals, which, including

the Port Chalmette property, will make 6000 acres of land and more than two miles frontage on the river. The Southern Railway, the Rock Island and the 'Frisco will, it is stated, be jointly interested in the extensive passenger and freight terminal plans of the latter. Outside of Port Chalmette the properties purchased by the 'Frisco are the Roy, Dupont, Bureaugard and others.

It is further announced that the blueprints for the 'Frisco terminals show that the freight, storage and switch yards will have a total capacity of 6000 cars, with forty-eight tracks, exclusive of the Chalmette yard. There will be stockyards, extensive coal sheds, cold storage and freight warehouses and other buildings on the line into the passenger station, with twenty-nine tracks reaching these different structures, besides two main lines to the depot. This union station, which the Southern, Rock Island and 'Frisco trains are to enter, is to be at Basin and Canal streets, and it is possible, according to reports, that the other roads entering New Orleans may become interested in this union terminal. L. S. Berg, general agent of the 'Frisco at New Orleans, is quoted as saying that the company is now arranging to begin work on the terminals and station.

To carry out these plans the Chicago, St. Louis, Memphis & New Orleans Railroad Co. has been organized to take over the property of the New Orleans & San Francisco Railroad, as the 'Frisco's New Orleans extension was originally known. On June 30 a meeting is to be held at New Orleans to complete the transfer. Mr. Berg is reported as stating that the three railway systems interested, namely, the Southern, the Rock Island and the 'Frisco, have undertaken to develop New Orleans and make it a very great seaport.

### A New Electric Line.

President John Duley of the Maysville & Mt. Olivet Traction Co. writes from Maysville, Ky., to the Manufacturers' Record concerning the line the company proposes to build as follows:

"It will be about twenty-four miles in length, and will start at Maysville, which is located on the Ohio river, the Chesapeake & Ohio and the Louisville & Nashville railroads. The population of Maysville is 10,000, including the suburbs. The road would pass through Washington, Murphysville and Sardinia, and terminate, under the present arrangements, at Mt. Olivet, the county-seat of Robertson county, which county is entirely without railroad accommodations, and is determined to have an outlet. The road will pass through the best farming country, and the towns which it touches are thriving villages, and would be good feeders for such a road. The officers are John Duley, president; E. Kenton, first vice-president; A. R. Howard, second vice-president; George W. Dye, third vice-president; W. W. Ball, treasurer, and James W. Fitzgerald, secretary.

"Furthermore, a road is being built from Columbus, Ohio, to Aberdeen, Ohio, a point just opposite Maysville on the Ohio side. Here is an opportunity for an enterprising company to construct a bridge, which will connect the two States at this point, and which at once would make a good toll road."

### Proposed Suburban Road.

Describing his plan to build a railway, Mr. George Pence writes from El Paso, Texas, to the Manufacturers' Record as follows:

"I am contemplating building a street railroad from El Paso to San Elizario, a distance of twenty-two miles, opening up

a valley twenty-two miles long and five miles wide. The object is to furnish transportation for fruits and vegetables, alfalfa and passengers, besides providing power to pump water for irrigating the land when the river is dry, which is about eight months out of the year. At present the fruit and vegetable grower cannot depend on a crop owing to the uncertainty of the water in the Rio Grande river. This valley is the home of the noted Mission grape, which took the first prize at the World's Fair of 1893.

"There are three towns on the line that I will furnish light and water for, and I would like to interest some Eastern capital. El Paso has a population of 35,000, and the people have no place to go. It is a great place for tourists from the East."

### Railroad Appointments.

The Pennsylvania Railroad Co. has promoted J. B. Thayer, Jr., general freight agent, to be fifth vice-president, a new office, and Mr. George D. Dixon was appointed freight traffic manager. James R. Wood, the general passenger agent, has been appointed passenger traffic manager, and Geo. W. Boyd was made general passenger agent. Edwin P. Bates is appointed central freight agent; Robert C. Wright, assistant general freight agent, and Rufus M. Pile, assistant general passenger agent. J. C. Searles is appointed general coal freight agent; Joseph T. Richards was appointed chief engineer maintenance of way; Alexander C. Shands, engineer maintenance of way; Robert M. Patterson, superintendent of freight transportation, and Charles M. Sheaffer, superintendent of passenger transportation. Messrs. Thayer, Dixon, Wright and Searles formerly occupied positions in the Pennsylvania service at Baltimore.

### Carolina, Knoxville & Western.

Concerning the proposed reconstruction of the Carolina, Knoxville & Western Railroad, Mr. R. E. Johnston, president of the Saluda River Lumber Co., writes from Greenville, S. C., to the Manufacturers' Record as follows:

"We intend building on the old bed of the Carolina, Knoxville & Western road twenty-one miles up to our timber purchase. The road from this city to the terminus runs through the most fertile country in this State for corn, cotton and vegetables."

There is strong talk of building this road on through to Knoxville, with the view to tapping the coal fields, it being one of the shortest routes to that section.

### 'Frisco Magazine.

The 'Frisco System Magazine for May opens with a very attractive article describing the town of Muskogee, I. T., which is the official seat of the federal government for the five civilized tribes. It is handsomely illustrated, one of the pictures being a likeness of Gen. Pleasant Porter, chief of the Creeks. Another illustrated article is the "Livestock Interests of Kansas." There are also several other contributions of equal merit, including an entertaining sketch entitled "Some Facts About Indian Territory." The magazine is issued by the passenger department of the St. Louis & San Francisco Railroad.

### A Handsome Train.

The passenger department of the Illinois Central Railroad has issued a pamphlet describing its daylight special train that runs between Chicago and St. Louis. This train is composed of vestibuled equipment, including day coach, reclining chair car, parlor car, buffet library car and dining car. The interior decoration is in the

latest and best style of the car builder's art, every comfort being provided. The exterior is finished in green, brown and gold, so that the train presents a very handsome and striking appearance. A. H. Hanson is general passenger agent of the company, with headquarters in Chicago.

### May Make a Coal Route.

Reports from Eastern Tennessee are to the effect that the Virginia & Southwestern Railway may build an extension eastward to meet the westward extension of the Carolina & Northwestern Railway, which is now building from near Lenoir, N. C., to the summit of the Blue Ridge. The construction of such a line would make possible the establishment of a coal route from the Tom's Creek region, in Wise county, Virginia, via the Virginia & Southwestern, the Carolina Northwestern and the Seaboard Air Line, to Wilmington, N. C., a plan which has been discussed for some time. Henry K. McHarg of New York is president of the Virginia & Southwestern, the headquarters of which are at Radford, Va.

### Union Terminals for Dallas.

Dispatches from Dallas, Texas, quote W. C. Connor, president of the Dallas Terminal Railway & Union Depot Co., as confirming the report that a great union passenger station is to be erected there. He is further quoted as saying that the Terminal Company will be reorganized with \$10,000,000 to \$15,000,000 capital, which will be spent in erecting a union depot and in concentrating all the freight business of all the roads entering Dallas. Each line will have its own freight stations, but all such depots will be controlled by the Terminal Company. Five years will be required to carry out the plan.

### Railroad Notes.

The Texas & New Orleans Railroad (Southern Pacific system) has issued a circular announcing the opening of its Beaumont-Dallas extension, giving it entrance over its own rails into the city of Dallas, Texas. S. F. B. Morse is passenger traffic manager at Houston.

The Northern Central Railway Co. makes the following statement of earnings and expenses for April, 1903: Gross earnings increase as compared with the same month of 1902, \$103,700; expenses increase, \$136,000; net earnings decrease, \$32,300. For the four months ended April 30, 1903, gross earnings increase as compared with the corresponding period of last year, \$535,900; expenses increase, \$637,500; net earnings decrease, \$101,600.

### Invitation to Kentucky.

Dr. T. B. Smith of Cynthiaana, Ky., writes to the Manufacturers' Record as follows:

"This is the bluegrass region, where the finest flax can be grown, and where water from the Licking river is excellent for natural bleaching and clearing of the flax filer. Water-power is nearby. An iron ore bed four to eight feet deep is beneath our city, gas has been struck, but not in paying quantities, at a depth of 400 feet; several artesian wells taste strongly of coal oil, and three miles from us is a lead mine lying idle for want of pluck, energy and capital."

On one day last week 1000 hogsheads of tobacco changed hands at Louisville, Ky., in a single transaction, representing more than \$100,000.

During May permits were granted at Atlanta for building operations representing \$401,703.



## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,  
Baltimore, Md., June 3.

The volume of business in the local lumber market continues of moderate proportions, and while the demand is steady, there is no urgent inquiry for material. In a local way buyers are purchasing only for immediate wants, and builders, yardmen, boxmakers and other woodworking concerns are not rushed with orders at the moment. The situation, however, is very satisfactory, and with the disturbing elements removed those in the trade look for a steady and substantial trade during the season. Prices for North Carolina pine continue to show a very steady tone, and mills throughout Virginia and North Carolina are generally busy on orders. Stocks of North Carolina pine are now well assorted, and the outlook encouraging. Cypress is steady, with considerable demand from builders. White pine continues quiet, with a light inquiry, and values firm. Poplar is still the prominent wood, and is in good demand, with the market strong for desirable stock. In all hardwoods the situation continues to show a steady demand for all dry stock, and in oak, ash and other woods prices are very steady. The foreign trade in hardwoods is improving, and the outward movement of better volume.

#### Norfolk.

[From our own Correspondent.]  
Norfolk, Va., June 1.

The week under review presents few features differing from those presented a week ago. The conditions under which lumbermen are operating continue satisfactory, and while there is no urgent demand for lumber, a steady trade is maintained, both with the local and out-of-town buyers. In all milling sections throughout the North Carolina pine belt mills seem to have orders sufficient to keep them running steadily, and the demand, while not so strong, is showing an improvement over that of a week ago. Prices throughout the general list are nominally firm and well maintained, while manufacturers are not disposed to make any concessions under the present outlook for business. The foreign inquiry is more of a feature than formerly, and there is now a more decided demand from buyers at the ports of the United Kingdom and Continent. In a local way there is more lumber now going into consumption than at any time during the present year. Contractors and builders generally are fully employed, and in the city and at suburban points many buildings and improvements are in course of construction. Local woodworking concerns are all fully engaged, planing mills having all the business they can handle at the moment, and box, crate and berry basket factories are all busy. Freight rates on lumber are firm, the last charter being the schooner Frank Deaming, 205 tons, with lumber from this port to New York at \$2.85.

#### Charleston.

[From our own Correspondent.]  
Charleston, S. C., June 1.

A fairly active movement is going on in most avenues of the local lumber trade. The demand continues steady and of considerable volume, and from all the Northern centers there is a good inquiry for lumber. Prices throughout the list continue very steady for both yellow pine and cypress, and for crossies there is a good demand. Throughout the State the

development of hardwood properties is now quite pronounced, with values of timber tracts increasing rapidly. The timber interests of the upper county are at present showing unusual development. Heretofore the cutting of timber has been confined in a great measure to the low country pine lands, but the Piedmont section is now attracting attention. Timber lands are in great demand, and prices advancing, while numerous milling plants and other woodworking concerns are being established to convert the various woods into lumber and utilize the refuse timber for the manufacture of various articles in woodenware. During the past week shipments have been of fair volume, the following clearances having been reported: Schooner Linah C. Kaminski for Bridgeport, Conn., with 300,000 feet of lumber; schooner John W. Linnell for New York with 650,000 feet; schooner Lizzie H. Patrick for Philadelphia with 350,000 feet, and schooner James D. Dewell for Providence, R. I., with 404,000 feet. The steamship Apache cleared for New York with 3780 feet of lumber among her cargo. At Georgetown receipts of logs have been unusually heavy during the past week, and timbermen of that section are reaping a rich harvest of dollars by large deliveries of logs, both cypress and pine, to the mills which line the banks of the Sampit. In order to supplement the log supply and avoid a shut-down in the future for want of timber, the Gardner & Lacey Lumber Co. is now putting into operation a steam skidder at Cedar Creek, on the Santee, and will haul logs from there by rail. The cypress logs obtained from that section for this company are said to be of unusual size.

#### Memphis.

[From our own Correspondent.]  
Memphis, Tenn., June 1.

The tone of trade in nearly every department of the local lumber industry is fairly active, with no urgent demand from any source. There is, however, a steady distribution of lumber, with the supply light, and very little prospect of any immediate addition to stocks. At all milling sections there is considerable activity, mills running more regular, but the output seems to be quickly absorbed, leaving no accumulation in any quarter. Of the various hardwoods on the open market, oak in quartered white, plain white and red is very firm as to value, and is the prominent wood offered. Poplar and ash are also very steady, commanding outside figures. Cottonwood has also attained very high prices, and is now nearly double the price it was eighteen months ago. Timber lands are now eagerly sought after in this section, and acreage increasing in value every year. A large number of hardwood lumber and timber buyers are visiting this section, and several large deals in timber are pending. Furniture men from Grand Rapids, Mich., are in the market for over 2,000,000 feet of hardwood for furniture purposes. Nearly every logging, timber and lumber firm in this section is disposing of their products as fast as it can be turned out. A railroad and timber development project of great proportions is now about to be inaugurated here, and it is stated that C. M. Carrier & Son of Sardis, Miss., contemplate developing 30,000 acres of timber land in the Delta section of Panola county and extending the Sardis & Delta Railroad several miles into virgin timber land that abounds in select hardwoods. It is stated the prospects are very flattering for the consummation of the plans in contemplation. Carrier & Son already have several saw-mills in operation on their property, and have in the past few years cleared and marketed a large amount of hardwood lumber. The firm proposes to issue \$300,000 in bonds,

giving first mortgage trust deeds as security. The deeds will be on both the timber lands and the Sardis & Delta Railroad. The bond issues have not yet been perfected, but will be probably in a few days.

#### Jacksonville.

[From our own Correspondent.]  
Jacksonville, Fla., June 1.

The lumber trade of this port continues to grow, and the volume of business for the month just ended shows an active market prevailing in nearly every department of the trade. Last week was one of great activity in shipments, over 2,000,000 feet of lumber being cleared in one day. During the month of May 115 vessels crossed St. John's bar, outward and inward bound. The shipments of lumber during May aggregated 18,925,298 feet coastwise and foreign. Of the total shipments, 1,487,000 feet was of cypress, and the rest yellow pine. The shipments of naval stores were also quite liberal, the quantity being shipped amounting to 19,550 barrels. The market for all desirable grades of lumber is very steady, with a good demand from Northern ports. Sawmills, both here and at outlying points, are all fairly well supplied with orders, and lumber receipts from milling sections are larger than usual. The general outlook for trade is regarded by lumbermen here as extremely encouraging, and from the number of vessels chartered to load here this month the indications are that the volume of business will be larger than that of the month of May.

#### Lumber Notes.

The shipments of lumber from the port of Charleston, S. C., last week amounted to 1,754,000 feet.

The Martin Lumber Co. of Kansas City has been incorporated, with a capital stock of \$25,000. The incorporators are A. J. Martin, Samuel T. Carl, Yancy J. Martin and others.

The Mississippi Naval Stores Co. of Hattiesburg, Miss., has been incorporated, with a capital stock of \$50,000. The incorporators are J. A. Carr, A. S. Carr and J. S. Turner.

The Tallulah River Lumber Co. of Atlanta, Ga., has been incorporated for developing timber and mineral lands. The incorporators are W. A. Love, W. C. Shafer and others.

The Yarborough Lumber Co. of Quitman, Clarke county, Mississippi, has been incorporated, with a capital stock of \$30,000. The incorporators are C. F. Thompson, S. H. Terral, J. M. Carter and others.

The Henderson Land & Lumber Co. of Clawson, Angelina county, Texas, has been incorporated, with a capital of \$40,000. The incorporators are S. W. Henderson, J. H. Kurth, A. J. Peary, Eli Wiener and others.

The saw and planing-mill plant of the Collins-Rudy Company of Maysville, Ky., was destroyed by fire last week, together with the lumber-yard occupied by Harold and Eugene Collins. The loss is estimated at \$10,000, with insurance \$4800.

The shipments of lumber last week from the port of Savannah aggregated 4,697,482 superficial feet, of which 1,245,670 feet were by steamer and 3,451,812 feet by sailing vessels. The distribution of shipments was to New York, Philadelphia and Baltimore.

The collector of customs at Gulfport, Miss., reported the following shipments last week: German steamer Bylgia for Yarmouth, England, and Rotterdam with 1,500,000 feet of lumber, valued at \$26,000; 167,000 feet of sawn lumber, valued at \$2200; British steamer La Porte with 1,359,000 feet of lumber, valued at \$18,-

385, and 529,000 feet of sawn timber, valued at \$7747. The coastwise shipments were the American bark Julia for New York with 501,000 feet of lumber.

The steamship Elswick Park cleared last week from Mobile, Ala., for Rotterdam and Hamburg with the following cargo: 347,745 superficial feet of lumber, 50,887 cubic feet of sawn timber, 20,902 cubic feet of hewn oak and poplar timber, and 705,349 superficial feet of pine lumber.

The Empire Lumber Co. of Mitchell county, Georgia, has been incorporated, with a capital of \$2000, with the privilege of increasing it to \$10,000. The incorporators are D. M. and D. W. Rogers of Mitchell county and J. C. Wilson of Atlanta. The company will transact a general lumber business.

The first full cargo of goods manufactured in New Orleans was shipped last week on the bark Hilda for Cape Town, South Africa. The cargo consisted of \$200,000 box shooks, equivalent to 1,000,000 feet of lumber. The order was secured from London merchants by S. T. Aleus & Co., Limited.

It is stated that Jonestown, Miss., will have a new spoke factory. Messrs. W. R. Sadler and others have organized a company with a capital stock of \$20,000, and will in a short time let contract for the erection of a factory building and machinery. Memphis and Jonestown capitalists will carry out the enterprise.

The fact that groves of hard maple trees have been located in the Wichita mountain regions has created great interest throughout Oklahoma, as it has not before been known that this variety of timber was to be found in that territory. The work of the United States forestry bureau in Oklahoma is bringing to light much of interest and value.

The C. M. Maestri Furniture Manufacturing Co. of New Orleans, previously reported, has been organized, with a capital of \$75,000. The officers of the company are C. M. Maestri, president; John Minot, treasurer, and John C. Hunick, secretary. A building has been about completed, and machinery will be installed within a few weeks for the manufacture of furniture.

The Albemarle Lumber Co., Hertford, N. C., has been incorporated, with a capital stock of \$100,000, with \$40,000 paid in. The stockholders are H. T. Holmes of Washington, D. C.; J. J. Fleetwood, M. H. White, W. A. Jackson, Jr., and Chas. Whedbee, all of Hertford. The company is organized to do a general lumber business and deal in real estate and engage in milling business, etc.

Charles E. Forstner and L. E. Phipps, who recently purchased the factory of the Chickamauga Manufacturing Co. at Chattanooga, Tenn., will operate the same on an extensive scale. A new warehouse will be erected and additional machinery installed for doubling its capacity in the manufacture of crates, berry boxes, firkins and baskets, and later will manufacture excelsior. The plant will be operated as the New Chickamauga Manufacturing Co., incorporated with a capital of \$100,000.

#### Southern Wood Pulp.

In a letter to the Manufacturers' Record, Mr. E. F. Millard of Waltham, Mass., writes that he has found in the South locations where conditions are such that, at a less cost than in Northern mills using only spruce, soft woods make a ground wood pulp suitable for manufacture into news, Manila, hanging, board and cheap book papers.

During the past week nearly 1000 head of cattle were loaded at Pensacola for shipment to South Africa.

## MECHANICAL.

## Notes from Northern Machine Shops.

By CHAS. S. GINGRICH, M. E.

## II.

## Engine Shops.

One of the common sights in an engine manufactory is a row of engine beds mounted crosswise on the platen of a large planer for the operation of planing the crankshaft bearings. Even small gas-engine frames require a large planer, so that the work may pass between the

The mechanism is positive, and there are no fede belts to shift. The distance traveled at the fast rate of feed about equals the distance traveled at the slow rate, so that the average rate of feed for the entire cut is nearly 15 per cent. faster than it would be if the feed were not changed to suit the cut when the work is passing through the machine.

I mention these details because it is close attention to these little things that enables the 12½-cents-an-hour boy who operates the milling machine to finish one of these engine frames in twenty-eight

Co., Buffalo, N. Y., I have seen this operation performed on a milling machine similar to the one mentioned above. The Cincinnati (Ohio) Milling Machine Co. has fitted up machines to do this same work for H. Bollinckx, Brussels. A single hole is drilled at one corner of the rectangular hole into which the brasses fit, and a cutter like that shown in Fig. 3 is passed through this drilled hole and removes the stock at a single cut, as shown in illustration. A second cut is then taken to finish the hole to size. The rod illustrated is 40-carbon hammered ma-

of the best machinery steel, while the rest of the machine is built of the same quality of iron that has helped to make the "Hill" machinery famous.

The table is a large, well-proportioned casting, so designed that nothing short of dynamite will break it, while the legs and other parts are strong and well proportioned. A countershaft, not shown in illustration, completes the machine.

The machine is built on generously strong lines, and, like all other "Hill" machines, is built to wear. It is six feet ten inches long over all, three feet wide, three

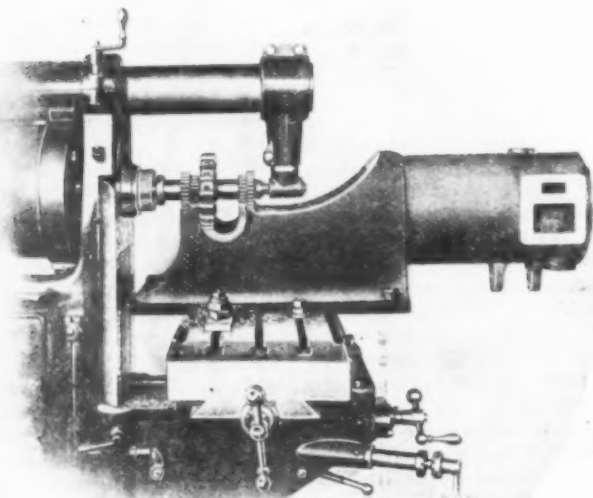


FIG. 1—MILLING ENGINE FRAMES ON CINCINNATI MILLER. [See "Notes From Northern Machine Shops."]

housings, and such a planer is invariably a great deal larger than the size of cut to be taken would warrant. We are so accustomed to doing the work in this way that we accept it as a matter of course and forget how awkward a job it really is until we see someone handling it in a great deal more simple manner. That was the writer's experience when, after having seen a well-known engine builder plane one of these pieces, he stepped into the shop of the Root & Vandervoort Engineering Co., East Moline, Ill., and saw them milling the crankshaft bearing on gas-engine frames up to and including their eight-horse-power engines in the manner shown on illustration herewith. The engine frame is strapped to the table of the miller in just as simple a manner as it would be strapped to the platen of a planer. The entire bearing for the crankshaft boxes and for the cap is finished at one cut, using a suitable gang of cutters, as illustrated.

minutes, which includes the time of handling and chucking the work. The shortest time in which an expert planer hand did this same work was one hour and thirty-five minutes.

The caps to fit these frames are milled on the same machine by using another suitable gang of cutters, and I am assured by Mr. Vandervoort that the saving effected is not all in the actual finishing of these pieces, but the vise work, which was formerly required in order to fit the pieces after they come off the planer, is now done away with entirely, as the parts are all completely interchangeable.

A large number of other parts of the engine, such as brackets and pedestals, are also being milled very economically. In some of the shops that build engines using the solid-end type of connecting rod the milling machine is coming into use for finishing these also. Fig. 2 shows one of these rods with a series of holes



FIG. 2.

The machine is worked at a feed of more than .1 inch per turn of cutter when the large cutter is entering the work. After it has entered full depth, the feed is dropped down to about 3-32 inch, and is again raised to the initial rate when the large cutter begins to come through. This is accomplished by the convenient arrangement of feed levers on this particular miller, whereby the rate of feed can be changed without stopping the machine, no matter how fast the cutters are turning or how heavy a cut is being taken.

drilled along the line of the rectangular hole into which the brasses are to be fitted. This is the method that has been in use ever since this style of rod was first made. After the holes are drilled the center is driven out and the hole is finished to size on a slotter. Those of us who have gone through this work are pretty sure to fully appreciate just how tedious and expensive this drilling and slotting process is. In the shops of the Gray & Blaisdell Co., Bradford, Pa., and the Contractors' Plant Manufacturing



NEW COMBINATION LATH MILL AND BOLTER.

chinery steel two inches thick, and the finished hole is 3x6 inches, with corners one-half-inch radius. The total time consumed in milling this rod, from the moment the first cut was started until the finishing cut was completed, was forty-two and one-half minutes. Of course, in doing this a good bit depends on the cutter. It must be firmly held in the spindle of the machine, and its outer end must be supported in the same manner as a cutter arbor is supported. The chips are also somewhat of a problem, but if a strong stream of oil is delivered to the cutter under pressure it will keep it clear of chips. This operation brings into play both horizontal and vertical automatic feeds of the miller, and since the feed must be stopped and reversed at the corners, it calls for a machine that has all the levers conveniently located.

## Combination Lath Mill and Bolter.

The new combination lath mill and bolter herewith illustrated is a machine strong and cheap enough to fill conditions in the lath industry. It meets all requirements, and has proven to be a favorite

feet six inches high, and when boxed occupies about seventy-two cubic feet; weight complete with countershaft, 1050 pounds.

Those interested in the cheap manufacture of laths are invited to write for "How to Make Good Laths," in which this machine and other interesting machines are fully illustrated. Address Wm. E. Hill & Co., North Park street, Kalamazoo, Mich., who build the machine.

## Protection of Wire Ropes.

The widely different uses of operative wire ropes, subjected to varying conditions, present a problem in the acquisition of a coating for exterior protection to satisfactorily answer the wide range of requirements. A dry atmosphere tending to speedy oxidation and brittleness, and consequent sloughing off of coating, presents itself in one location, while at another a moist atmosphere, or possibly an almost continuous subjection to water, sometimes impregnated with acid, prevails. Many exposed wire ropes are subjected to the extremes of summer and winter. The illustration herewith presented shows application of a special coating termed "Wire-Rope Shield,"



SHIELD WIRE ROPE SHIELD.

with the lath manufacturer from its introduction.

The machine consists of a one-saw bolter and a three-saw lath mill mounted on one table, with strong iron legs.

The bolter saw, which is twenty-two inches in diameter, has a feed roll, adjustable guide and a splutter behind the saw.

The lath mill has 12-inch saws, with feed and adjustable pressure rollers both in front and behind. There is a shield over the saws to prevent accidents. The arbor, roll shafts and rolls are all made

which possesses the requisites of a satisfactory coating in being tenacious, pliable, lubricating, waterproof and free from destructive acid. The high points of the strands are protected from abrasion by a lubricating film deposit, and a like deposit prevents chafing of the wires. The wire rope is completely sealed to resist acid, atmospheric, gaseous, sulphurous or water attacks. The satisfactory use of this shield on wire ropes from an office building to extremely wet mines strongly impregnated with acid, and to dredging



machinery constantly subjected to water, indicates its efficiency. The illustration also shows an interior material termed "Wire-Rope Filler," a flexible cushioned lubricant, protecting from abrasive wear, and effectually sealing against water-soaking, acid or gaseous attacks, incorporated in the manufacture of wire ropes, and adopted by many wire-rope manufacturers in making all sizes and kinds of operative wire ropes. An evident increase of life results from the external protection afforded by the shield, and further benefits where applied to a wire rope already treated internally with the filler. The Ironsides Company, Columbus, Ohio, manufactures these materials.

#### Car Mortising and Boring Machine.

Old carpenters and other woodworkers will remember when mortising was done by hand. It was the custom to first bore holes where the mortise was to be made so as to remove much of the material and

meet the heaviest of strains, the machine being intended to operate chisels as large as two and one-half inches, and to mortise through a 12x12-inch stick of timber.

The headstock, carrying the crankshaft and chisel bar, is fed down to the work by power, and has a quick return movement. The power for this purpose is taken from friction clutch pulleys in rear of machine, a lever at the base serving to apply the power for starting the screw in either direction, for raising or lowering the headstock. The headstock is stopped auto-

The crankshaft has tight and loose pulleys eighteen inches diameter by four inches face, and should run 250 turns a minute. The driving of these pulleys should be done from the main line shafting.

A countershaft with tight and loose pulleys and necessary driving pulleys is provided for driving the friction feed and boring spindle.

Drawings and instructions for erecting and starting the machine are furnished with each machine.

the machine is arranged as a universal borer.

The frame being quite rigid in every direction except in a horizontal plane, provision is made for lowering the sand head to the work by a counterbalanced hand lever which gives the spindle carrying the sand head (or auger bit, as the case may be) a vertical movement of four inches.

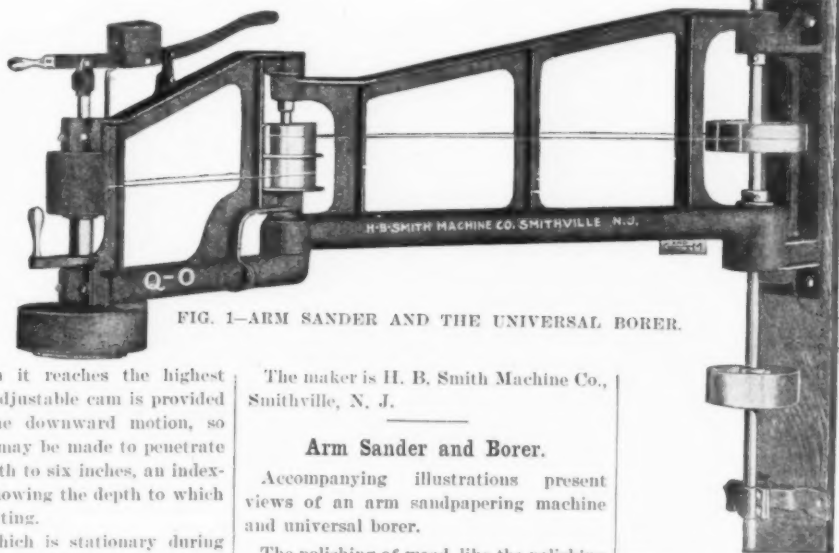


FIG. 1—ARM SANDER AND THE UNIVERSAL BORER.

The maker is H. B. Smith Machine Co., Smithville, N. J.

#### Arm Sander and Borer.

Accompanying illustrations present views of an arm sandpapering machine and universal borer.

The polishing of wood, like the polishing of metals and other materials, was originally done by hand. Sanded or polishing drums and disks were used by passing the materials over them by hand, but it is claimed that H. B. Smith was the first to move a sand disk over the work, thus enabling the operator to sand-polish large articles, such as doors, desktops, etc. He constructed his first machine to move like an arm with a rapidly revolving sand disk in the hand and moving in a horizontal plane. Hence the name "Arm" or "Elbow" sander.

The early machines were made with frames of solid section. The machines illustrated herewith are built on the same general plan except that the lower framing is of hollow oval section, so as not only to be stiff, but to serve as a conductor to

When the machine is sand-polishing the spindle is held to the work by the weight which is moved forward, so as to bring the spindle down to an adjustable stop, and the pressure may be assisted by the hand, and when boring the spindle is brought down by the hand lever to the same stop and is returned to its upper position by the weight which is shifted to other end of lever.

The bearings are all babitted, and those of the spindle are compensating. The pulleys are all of ample size, and the machine is belted strong enough to do all kinds of work usually done on this class of machine. The vertical driving shaft on

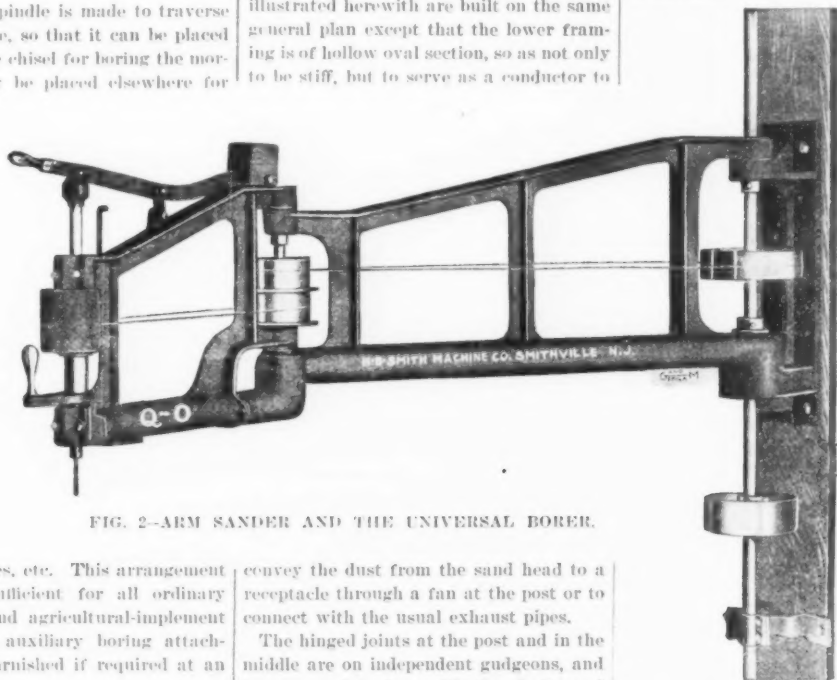


FIG. 2—ARM SANDER AND THE UNIVERSAL BORER.

boring bolt holes, etc. This arrangement is generally sufficient for all ordinary work in car and agricultural-implement shops; but an auxiliary boring attachment can be furnished if required at an additional cost.

All spindles are of crucible steel; the working parts of machine are made very strong and carefully fitted, and all important bearings are of ample size and made compensating.

Five chisels and five augers of corresponding size are furnished with each machine, also a twist belt for operating the chisel reverse.

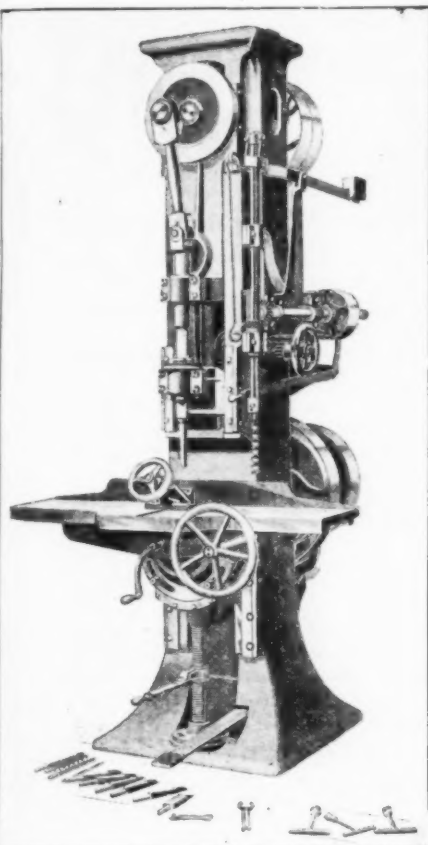
convey the dust from the sand head to a receptacle through a fan at the post or to connect with the usual exhaust pipes.

The hinged joints at the post and in the middle are on independent gudgeons, and in no way interfere with the shafts and bearings, and are so constructed as to prevent the dust getting into the journals; hence the wearing parts are all durable.

The disk is eight inches in diameter and provided with a cam ring for holding on the paper. It is provided with an adjustable hood, which can be lowered so as to nearly touch the work, and the sand head can easily be removed for boring, when

the post is provided with tight and loose pulleys (loose pulley not shown), which may be above or below, as occasion requires.

When the machine is furnished as a sander alone it is provided with sand head and hood complete; when combined as a sander and borer the spindle is drilled to receive the shanks and two augers are



CAR MORTISING AND BORING MACHINE.

then complete the operation by chisel and mallet. Foot-power mortising machines came in about fifty years ago, and at about the same time H. B. Smith patented a power-mortising machine with automatic frictional reverse to the chisel. A reciprocating motion was imparted to the chisel, and the table carrying the material to be mortised was raised into the chisel, and as the table was lowered so as to cut the other end of the mortise the chisel would automatically reverse by frictional power, and hence the chisel was always in position to do the work. Many thousands of these machines have been built and are being built and used to this day.

Our illustration represents an improved form of this popular reciprocating class, arranged for the heavier kinds of work, as in the case of railway car frames, agricultural implements, bridge work, etc., in which case the table is stationary except for adjustment, and the chisel while reciprocating is brought down into the work.

The machine is modern in design, and embraces several novel features. The framing is massive and proportioned to

supplied; when furnished as a universal borer along the spindle is bored to receive bids and two augers are included, but is without hood and sand head.

Universal chuck can be furnished for the boring spindles when desired.

The machine is built by H. B. Smith Machine Co., Smithville, N. J.

## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### Texas Oil-Mill Superintendents' Convention.

The Texas Oil-Mill Superintendents' Association met on the 27th ult. in its tenth annual convention at Sherman, Texas. The convention was called to order by H. J. J. Thiessen, who was later elected president pro tem, pending the arrival of Past President Parkhouse of Cisco. Routine business closed the first day's session. At the second day's session Acting President Parkhouse delivered an address. Following the regular routine business of the association, including reports on bills, communications, etc., came the reading of several excellent papers. J. P. Bass of Jonesboro, Ark., presented a paper on the "Proper Handling of Cake;" P. M. Moore of Dallas, Texas, a paper on the "Selection of Steam Boilers;" "Crude Oil from Press to Shipping Tank," by Mr. Winderlich of Waco, Texas, was probably one of the most important presented at this session. Subjects of general discussion were the "Filter Press" and the "Galvanized Storage Tank." At the afternoon session came the reading of the paper, "Scales, Their Care and Maintenance," by L. M. Hatcher, scale inspector for the International & Great Northern Railway. With the reading of this paper came the adjournment, after which the property and plant of the Sherman Oil & Cotton Co. was thoroughly inspected.

At the third day's session the following papers were read: "Belts, Their Use and Abuse," by Wm. Bauer; "Bolts, Their Use and Abuse," by the same member. One of the most comprehensive papers of the convention was that of Acting President Parkhouse, who had for his theme "The Labor Question." The afternoon session was devoted to the election of officers and other similar arrangements incidental to final adjournment. The following officers were elected for the ensuing year: H. J. J. Thiessen, president, Sherman, Texas; H. Winderlich, vice-president, Waco, Texas; M. B. Wilson, secretary-treasurer, San Marcos, Texas. The next meeting is to be held at Houston, Texas, about June 1, 1904.

### Interstate Cottonseed Crushers' Association in Convention.

The seventh annual convention of the Interstate Cottonseed Crushers' Association met in Memphis on the 26th ult., with an attendance of 249 delegates from twenty-three States and Territories. Forty-seven new members were added to the association. The principal features of the first day's proceedings were the addresses of welcome by President Alexander Allison of the Memphis Merchants' Exchange, and a response by Mr. John W. Allison, president of the association. At the afternoon session President Allison delivered his annual address, and Major Robert Gibson submitted his annual report, which showed the total membership of the association was now 316, of which 163 were mills and 153 were firms. It also showed that the association was free from debt

and had \$1200 in the treasury. The morning session of the second day was called to order at noon. The reports of committees on rules and fire insurance consumed the entire day. At the third day's morning session the discussion on the report of the committee on rules was taken up. Rules 20, 21, 22, 23, 24 and 25 were adopted as recommended by the committee, though efforts were made to amend sections of 23 and 25. The following resolution was offered, which was unanimously adopted:

"Whereas, pure-food chemists of acknowledged authority throughout the world have unequivocally declared that oleomargarine, when properly manufactured, is a wholesome and nutritious food product; and

"Whereas, many hundreds of thousands of our people are pleased with its taste and satisfied with it as a food; and

"Whereas, large numbers of these, particularly in the cities of our country, are actually dependent upon it as a table requirement; and

"Whereas, there is no good and legitimate reason why this product should not be manufactured and sold upon its merits without legislative discrimination; and

"Whereas, Congress has placed a prohibitive tax upon this wholesome and necessary food product because of the importunities of the manufacturers of a competing product; therefore be it

"Resolved by the Interstate Cottonseed Crushers' Association, in annual meeting assembled, that the tax upon oleomargarine is declared outrageous class legislation and un-American in principle, and that this blot upon the statute-books should be removed at the earliest opportunity."

The convention adjourned after electing the following officers: President, A. H. D. Perkins of Memphis, Tenn.; vice-president, C. Fitzsimons of Columbia, S. C., and secretary and treasurer, Robert Gibson of Dallas, Texas.

### Cottonseed-Oil Notes.

It is stated that the Gainesville Cotton Oil Co.'s plant of Gainesville, Ga., has been purchased by the Planters' Oil Mill, paying in the neighborhood of \$30,000 for it.

The Cotton Oil Mill Co. of Georgetown, Texas, has just shipped fourteen cars, about 400 tons, of cottonseed meal consigned to dealers in England. The shipment was made via Galveston, thence to Liverpool.

The company reported recently as organized for the erection of a cottonseed-oil mill and fertilizer factory at Clinton, La., has incorporated as the Clinton Oil & Manufacturing Co., with a capital of \$60,000. D. W. Pipes is president, and P. A. Fitzhugh, general manager.

A meeting of the directors and stockholders of the Wilnot Cotton Oil Mill at Wilnot, Ark., was held last week, and the following officers were elected for the ensuing year: W. T. Cone, president; William Gains, W. B. De Yampert, L. S. Eatman, T. R. Pugh, W. E. Barnes, J. W. Harris and W. T. Cone, directors, and W. B. De Yampert, secretary and treasurer.

It is stated that in a few days work will be commenced in Pine Bluff, Ark., on an 80-ton cottonseed-oil mill to cost \$100,000. An option has been secured on a piece of ground in the eastern section of the city, where the plant will be located. A. H. D. Perkins of Memphis is said to be at the head of the enterprise, and with him are associated a number of Memphis capitalists. The mill will be the third plant of its kind to operate in Pine Bluff.

It is stated that a company has been organized at Jonestown, Tenn., with a

capital stock of \$50,000, to be known as the Jonestown Cotton Oil Co. The company will erect a mill to cost \$50,000, and contracts have been let for the erection of buildings and placing of necessary machinery, the plant to be ready for operation about October 1. The officers of the company are W. R. Sadler, president; E. M. Wise, vice-president, and George Richberger, secretary and treasurer.

Quotations of cottonseed products at the Cotton Exchange in New Orleans on the 30th ult. were as follows: Prime refined oil in barrels, per gallon, 42½ cents; off refined oil in barrels, per gallon, 36 cents; prime crude oil, loose, per gallon, 35 cents; prime cottonseed cake, per ton of 2240 pounds, \$24.50; prime cottonseed meal, per ton of 2240 pounds, \$24.75; soap stock, per pound, loose, 1.12½ cents; linters, choice, per pound, 4¾ cents; A, 4½ cents; B, 3½ cents; C, 3½ cents; cottonseed in sacks delivered at New Orleans, per ton of 2000 pounds, \$13; in bulk delivered at New Orleans, per ton of 2000 pounds, \$12.

Quotations on May 30 at the New Orleans Maritime and Merchants' Exchange, Limited (April shipment from the mills), were as follows: Prime cake, \$24.50 per long ton, ship's side; off cake, \$22 to \$23 per long ton, ship's side, according to quality; prime meal, \$24.50 per long ton, ship's side; off meal, \$19 to \$22 per long ton, ship's side, according to quality; prime crude oil, 35 cents per gallon loose f. o. b. mill; off crude, 25 to 30 cents per gallon loose f. o. b. mills, according to quality; prime refined oil, 40 to 41 cents nominal per gallon loose in barrels, ship's side; off refined oil, 35½ to 36 cents per gallon loose in barrels, ship's side; soap stock, \$1.17½ per 100 pounds, basis 50 per cent. fatty acid; linters, per pound, f. o. b. mills flat—A, 3½ cents; B, 3 cents; C, 2½ cents; low linters, 1½ to 2 cents per pound f. o. b. mill flat, according to quality.

## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., June 3.

In sympathy with the firm tone in other fertilizer ingredients, the market for phosphate rock is very steady, with moderate offerings. Receipts at this port have been quite liberal during the month of May, and for the present month are likely to be greater in volume. The phosphate charters reported during the past week were as follows: British steamer Seaw Fell, 1379 tons, from Port Inglis to Antwerp at 13, 6, June; a foreign steamer, 3300 tons, deadweight from Port Inglis to Antwerp at 13½, June; British steamer Romsdalen, 1632 tons, from Brunswick to Rotterdam at 11, 9, June, and schooner Ada F. Brown, 1294 tons, from Port Tampa to Baltimore on private terms. Reports from producing points are all very favorable, development in every section being pushed with unusual enterprise. There is said to be more activity in the phosphate mines of Maury county, Tennessee, than for the past three years. Mines at Mt. Pleasant, Carter's Creek, Southport and Spring Hill are all working full crews, and some fifty cars are leaving Mt. Pleasant daily for domestic and foreign markets. There is a strong export demand, and a good inquiry from domestic sources. Prices for all grades are firm and without change. The South Carolina miners are also working with a good force, and for domestic and export grades the market is very steady. The Stono Phosphate Co., just incorporated, is likely to extend its present territory, and will mine extensively. In Florida the situation is showing up in good form, and the development

throughout the State is active. Both hard rock and pebble are quoted firm as to value, with a tendency of a slight advance in the latter. Shipments from the ports during the month of May were quite heavy.

### Fertilizer Ingredients.

The market for ammoniates continues to show considerable strength, with a fairly active demand from Eastern and Southern buyers. Messrs. Thos. H. White & Co., in reviewing the market for the month of May, publish the following: "The ammoniate market during early May was quite strong for high-grade tankage on twelve months' contracts, the demand being principally from Southern buyers; for May and June shipment buyers showed little interest. During the latter half of the month the demand from Eastern buyers was good, and under the continual buying of both prompt and futures the market picked up considerably, and at the close is strong."

The following table represents the prices current at this date:

Sulph. of ammonia (gas), spot,	\$3 07½ @ 3 10
do. foreign prompt,	3 20 @ 3 25
Nitrate of soda, spot Balto.,	2 15 @ 2 20
Blood,	2 57½ @ 2 60
Azotine (beef),	2 57½ @ 2 60
Azotine (pork),	2 57½ @ 2 60
Tankage (concentrated),	3 45 @ 2 47½
Tankage (3 and 30),	2 00 & 106½ @ 2 10
Tankage (7 and 30),	2 50 @ 2 50
Fish (dry),	32 50 @ 35 00

### Phosphate and Fertilizer Notes.

The shipments of phosphate from Port Inglis, Fla., for the four months ending April 30 were as follows: January, 2711 tons; February, 4887 tons; March, 5807 tons; April, 10,381 tons—a total of 23,876 tons.

Notice of the \$2,000,000 bond issue of the Prairie Pebble Phosphate Co. of Savannah was filed last week with the secretary of State at Atlanta, Ga. The bonds will be payable in thirty years at the home office of the company in Savannah, and will draw 5 per cent. interest annually.

The British steamer Strathmore, which sailed from Charleston, S. C., on the 28th ult., arrived in Baltimore on Monday last with 1200 tons of guano consigned to the Baugh Chemical Co. This guano comes from the Lobo Islands, in the Pacific ocean, and is the first cargo received from that section since 1880.

Dispatches from Atlanta, Ga., state that a cyclone has wrecked the Gainesville Cotton Mills and the Pacolet (S. C.) Manufacturing Co.'s branch mill, both at Gainesville, near Atlanta. The damage is said to amount to about \$150,000. It was only last week that the Gainesville plant was mentioned as contracting for enlargements and new machinery to cost \$200,000.

The Stono Mining Co. of Stono, S. C., has been incorporated, with a capital of \$50,000, for conducting a general mining business. The incorporators are J. L. Perry, J. Ross Hanahan and J. A. Hertz. The Stono Mining Co. wishes to secure additional territory and present certain matters to the phosphate commissioners. Governor Heyward will call a meeting of the commission between June 20 and July 1.

The High Springs Hornet of High Springs, Fla., says: "F. E. Williams of Alachua, who is prospecting the Dibble tract of land near this city, reports that the discovery of phosphate is very good; that so far as pitted the rock is of a splendid analysis, and will bring good money. The deposit is quite near the city, and when the plants are constructed and perpetuated they will be a great financial stimulant to High Springs. It is said there is plenty of phosphate rock within the incorporated limits of the city that remains to be mined yet."



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Alexander City—Water-works.—City has voted issuance of \$17,000 of bonds for water-works recently mentioned. Address "The Mayor."

Bessemer—Foundry and Machine Shop.—Bessemer Foundry & Machine Co. will enlarge plant by erection of an addition 78x10 feet.

Birmingham—Coal Mines and Coke Ovens. Collins Coal & Coke Co. has been incorporated, with capital of \$50,000, by J. A. Collins of Woodlawn, W. A. Collins of Birmingham and others.

Birmingham—Coal Mines.—R. H. Sayre has purchased 1080 acres of coal lands in Jefferson county, and will open up coal mines and build coke ovens at once. It is said that the Pittsburg & Southern Coal & Iron Co., recently reported, and in which R. H. Sayre is interested, has no connection with above purchase.

Birmingham—Metal Company.—Bates Metal Co. has increased capital from \$20,000 to \$50,000.

Bridgeport—Coal-mining Plant.—Bridgeport Coal & Coke Co., reported recently as incorporated with capital of \$100,000 for development of coal mines, will install at once coal-mining plant of 500 tons daily capacity. Address C. F. Seofield, secretary.\*

Clayton—Electric Plant and Water-works. Contract for construction of water-works and electric-light plant, for which \$20,000 of bonds was lately reported as having been issued, will be awarded June 16. For information and particulars address J. S. Williams, mayor.\*

Hartselle—Gas-pipe Line.—Great Southern Oil & Development Co., Limited, with offices at New Decatur, Ala., operating extensive oil and gas properties at Hartselle, is making arrangements to pipe gas (not oil, as was reported last week) to Decatur.

Russellville—Iron Mines.—Alabama-Virginia Iron Co. has been incorporated, with capital of \$51,000, for development of its iron properties near Russellville. A. J. Phillips of Portsmouth, Va., is president; C. E. Wilson of Russellville, vice-president, and W. S. Douglass of Russellville, general manager. As developments warrant company will in-

crease capital stock, build furnace and make other improvements.

## ARKANSAS.

Des Arc—Button Factory.—F. E. Brown and associates will establish pearl-button factory, and desire correspondence with interested parties.

Helena—Paving.—City has voted issuance of bonds for paving streets with vitrified brick; Major Purvis, engineer.

Hope—Ice Factory.—Hope Ice & Coal Co. will equip its cold-storage house with 20-ton refrigerating machine, contract for which has been awarded.

Little Rock—Lumber Mill.—Farrell-Miles Lumber Co., Limited, recently reported, has purchased machinery for mill of 60,000 feet per day capacity.\*

Little Rock—Telephone Exchange.—Southwestern Telegraph & Telephone Co. will erect two-story fireproof brick office building and central exchange, in which will be installed additional switchboard of 7000 'phones. T. L. Powell, agent, may be addressed at Little Rock.

Mayflower—Cotton Gln.—Mayflower Gin Co. has been incorporated, with capital of \$3000, for ginning cotton, manufacture of cottonseed oil, etc., by D. R. B. Grumble, Wilay Mosley and Oscar H. Winn.

Pine Bluff—Cotton-oil Mill.—A. H. D. Perkins of Memphis, Tenn., and associates are organizing \$100,000 company for erection of 30-ton cottonseed-oil mill.

Texarkana—Saw-mill.—Union Saw-Mill Co. has increased capital from \$300,000 to \$500,000.

## FLORIDA.

Auburndale—Machine Shop and Foundry, etc.—Cline Engineering Co., recently organized, will locate at Auburndale as mechanical, electrical and contracting engineers, and will erect office and warehouse; later on, if business warrants, an electrically-equipped foundry and machine shop will be established. Address for further particulars secretary-treasurer Board of Trade or W. A. Sands, president.

Boynton—Ice Plant.—Boynton Packing Co., recently incorporated with capital of \$10,000, will erect ice factory.

Brooksville—Telephone System.—Brooksville Telephone Co. has been purchased by W. A. Fulton, G. C. Martin, J. D. Burritt, L. B. Varn and others, who will improve and operate the system.

Jacksonville—Telephone Systems.—Independent Telephone Association of Florida has been organized, with W. G. Brorein of Tampa, Fla., president; W. N. Shine of Jacksonville, vice-president, and W. B. Mitchell of Sanford, Fla., secretary, for purpose of bettering the facilities and conditions of all the independent telephone exchanges in the State of Florida.

Miami—Brass and Iron Foundry.—A. Barrett, Box 185, has established machine shop, as recently reported, and will later on add brass and iron foundry.

## GEORGIA.

Atlanta—Real-estate Improvement.—Empire Land Co. has been incorporated, with capital of \$100,000, and privilege of increasing to \$500,000, for dealing in, developing and improving real estate, by J. C. Fain, W. T. Perkerson, Eugene M. Ottley and Harry L. English.

Atlanta—Furnace Company.—J. F. Lester Furnace Co. will increase capital stock from \$100,000 to \$1,000,000.

Atlanta—Timber and Mineral Land Development.—Tallulah River Lumber Co., with capital of \$125,000, has been incorporated for developing timber and mineral lands, by W. A. Love, W. C. Shafer and others.

Atlanta—Mercantile.—Chartered: K. M. Turner Company, with capital of \$25,000, by K. M. Turner and others.

Atlanta—Publishing.—Chartered: Art & Photography Publishing Co., with capital of not less than \$5000 nor more than \$10,000, by K. M. Turner and others.

Atlanta—Heating and Plumbing.—Farrell Heating & Plumbing Co. has been incorporated, with capital of \$25,000, by Daniel A. Farrell, Jas. E. Farrell and E. W. Dutton.

Atlanta—Brick Works.—South River Brick Co. has purchased and will operate brick works of Clinton Brick Co.

Atlanta—Lumber Company.—Empire Lumber Co. has been incorporated, with capital of \$3000, and privilege of increasing to \$10,000, by D. M. Rogers, D. W. Rogers and J. C. Wilson.

Atlanta—Mercantile.—Chartered: F. S. Cox & Smith Co., with capital of \$10,000, and privilege of increasing to \$100,000, for conducting general commercial business, by F. S. Cox and Ira Smith.

Augusta—Elevators, etc.—Augusta & Sumnerville Railroad Co. will erect grain elevators and storage warehouses.

Augusta—Electric-light and Power Plant.—Leonard Phinix and associates will erect and operate co-operative electric-light and power plant.

Augusta—Cotton Compress.—Union Compress Co. is making extensive improvements, installing additional machinery, etc.

Barnesville—Planing Mill.—Barnesville Planing Mill Co. is enlarging and improving its mill.

Barnesville—Knitting Mill.—Oxford Knitting Mills will increase capital by \$50,000 and double plant. Contracts have been awarded for additional machinery and building materials.

Dalton—Ochre Mines.—George G. Glenn has discovered ochre or mineral paint on his property, and contemplates developing. Correspondence from interested parties is solicited.

East Point—Repair Shops, etc.—Central of Georgia Railway, J. F. Hanson, chairman board, Macon, Ga., has purchased 350 acres of land near East Point, and will, it is said, build repair shops, roundhouse, switching yards, etc.

Gainesville—Cotton-oil Mill.—Planters' Oil Mill Co. has purchased and will operate cottonseed-oil mill of Gainesville Cotton Oil Co.

Lindale—Power-house.—Lindale Street Railway Co. will build new power-house.

Moultrie—Oil Mill and Ginnery.—J. E. Coleman and S. E. Nace, both previously reported as erecting cottonseed-oil mills and ginneries, will consolidate the two plants and operate under one management, organizing company with \$50,000 capital.

Rome—Clothing Factory.—Robert P. Yancey, W. W. Bowie, Geo. P. Freeman and others have incorporated Hub Clothing Co., with capital of \$5000, for manufacture of clothing, etc.

Rome—Cotton Mill.—Anchor Duck Mills will increase capital from \$75,000 to \$150,000 for enlargement; now has 7000 spindles and about 210 looms.

Savannah—Ice Factory.—Anton P. Wright, president People's Ice & Cold Storage Co., previously reported, has received plans for erection of building, but has awarded no contracts either for building or machinery.

Valdosta—Lumber Mill.—J. F. Bailey Co., reported recently as incorporated for manufacture of lumber, has mill already established.

Valdosta—Street Paving.—City has awarded contract to Southern Paving & Construction Co. of Chattanooga, Tenn., for paving streets with brick.

Vidalia—Oil Mill.—W. T. Jenkins is president; G. N. Mathews, vice-president, and J. E. Schumpert, secretary-treasurer, of the company reported recently as being organized, with capital of \$30,000, for erection of cottonseed oil mill.

## KENTUCKY.

Cloverport—Land Improvement.—J. C. Nottle, S. S. Reid, J. D. Babbage, J. W. Tate and others have incorporated the Cloverport Real Estate & Improvement Co., for dealing in and improving lands.

Cloverport—Electric Plant.—E. B. Brice, president of the Perfect Combustion Co. of America, is preparing to install electric plant for lighting city in yards of Patton Vitrified Brick Co.

Cloverport—Roof and Tile Factory.—J. Broh, Chas. A. Carry, A. H. Murray and C. R. Murray of Huntington, W. Va., will establish roof and tile factory at Cloverport.

Dawson Springs—Salts and Water Company.—Dawson Salts & Water Co. has been incorporated, with capital of \$5000, by W. I. Hamby, H. G. Hamby and A. E. Orton.

Dixon—Coal Mines.—Chartered: Webster County Coal Co., with capital of \$25,000.

Gladstone—Electric-light Plant.—Gladstone Coal & Coke Co., recently reported, will install electric-light plant.

Louisville—Piano and Organ Factory.—Company will be organized, with capital stock of \$500,000, for erecting four-story piano and organ factory. Dr. W. H. Netherland is said to be interested.

Louisville—Coal Mines.—Chartered: Jellico-Laurel Agency, with capital of \$100,000, to own and operate coal mines, by J. B. Speed, S. Speed, F. M. Sackett and W. S. Speed.

Louisville—Lumber Company.—L. A. Wiedeman Lumber Co. has been incorporated, with capital of \$4000, by L. A. Wiedeman, Andrew Ellison, Jr., Lewis J. Wiedeman, Jr., and others.

Louisville—Cloak Factory.—Besten & Langan will build two-story brick addition at cost of \$6000 to their cloak factory.

Paducah—Iron Furnace.—Kentucky Iron Co., operating the local furnace, will improve same at cost of \$40,000. New stove, boilers and other machinery will be installed.

Pikeville—Woodworking Factory.—Crossley-Cox Company, reported recently as incorporated for manufacture of lumber, etc., will install saw and planing mill and other wood-working machinery. Address W. B. Cox, secretary.

Richmond—Water-works.—Richmond Water & Light Co. will extend and improve its water system.

Somersett—Electric Plant, etc.—Stearns Coal & Lumber Co., operating coal mines, etc., at Stearns, is making improvements, which include construction of lake for furnishing the town and company with water and installation of electric-light plant.

Uniontown—Ice Factory.—M. L. Clayton will erect ice factory, and has not contracted for machinery.

Wayne County—Oil Wells.—Hoosier Slide Oil Co. of Michigan City, Ind., has been incorporated, with capital of \$200,000, for development of oil wells in Wayne county.

## LOUISIANA.

Baton Rouge—Heading Factory.—Woolworth & Cowles Co., Columbus, Ky., manufacturer of slack-barrel heading, is looking for location for factory, and may probably remove to Baton Rouge, as lately reported.

Clinton—Oil Mill and Fertilizer Factory.—Company reported recently as organized for erection of cottonseed-oil mill and fertilizer factory has been incorporated as the Clinton Oil & Manufacturing Co., with capital of \$60,000. D. W. Pipes is president, and P. A. Fitzhugh, general manager.

Donaldsonville—Mercantile.—Joseph Gondran Mercantile Co. has been incorporated, with capital of \$6000, by Joseph Gondran and others.

Jennings—Oil Wells.—Chartered: Rowson-Haber Oil Co., with capital of \$10,000, for developing oil properties.

New Orleans—Bridge.—American Crescenting Works has made proposition to city for construction of bridge over Orleans canal at intersection of Metairie road.

New Orleans—Furniture Factory.—C. M. Maestri Furniture Manufacturing Co., previously reported incorporated with capital of \$75,000, has completed organization, electing C. M. Maestri, president; John Minot, treasurer, and John G. Helmick, secretary. Building is about completed and machinery will be installed within a few weeks for manufacture of furniture.

New Orleans—Sewerage.—Dowdle & Windett will begin at once construction of part of city's proposed sewerage, for which they have contract.

New Orleans—Car Shop.—New Orleans Railways Co., W. W. Miller, vice-president, contemplates extensive improvements, which include enlargement of its several barns and construction of car shops, buildings of which will, it is said, cover four blocks.

New Orleans—Ice Factory and Cold-storage Plant.—Crescent Ice Co. has had plans made for remodeling plant of Municipal Ice Manufacturing Co., and will install 150-ton ice plant and erect 25,000-ton cold-storage warehouse.

New Orleans—Irrigation System, etc.—Louisiana Rice Prairie & Canal Co., Limited, has been incorporated, with capital stock of \$5,000,000, for developing and cultivating in rice 300,000 acres of land which it owns in Lafourche and Terrebonne parishes; canal will be constructed for irrigation purposes and other improvements made of an extensive character. Company was promoted and organized by O. W. Crawford. Officers are

George G. Metzger of Toledo, Ohio, president; J. M. Dresser, New Orleans, vice-president, and Edward Foerster, New Orleans, secretary-treasurer.

Plaquemine—Sugar Mill, etc.—Frederic Wilbert, John Wilbert, Peter G. Wilbert and others have incorporated the Wilbert's Myrtle Grove Planting & Manufacturing Co., with capital of \$150,000, for cultivation of sugar-cane, manufacture of sugar, etc.

Rayne—Electric-light Plant and Water-works.—City will begin at once construction of its proposed electric-light and water-works plants, for which \$20,000 of bonds was previously reported as having been issued. Address "The Mayor."

Shreveport—Brewery.—Shreveport Brewing Co. will equip brewery (now in course of erection) with two 35-ton refrigerating machines, contract for which has been let.

#### MARYLAND.

Baltimore—Mantel Factory.—Charles Mills has contract for erecting proposed mantel factory of the Steiner Mantel Co., lately reported; main building will be three stories, of brick, 60x150 feet; cost \$30,000.

Baltimore—Candy Factory.—B. W. and E. Minor are preparing plans for two-story brick factory building for Elmer H. Josselyn & Co., candy manufacturers.

Baltimore—Transportation Company.—Merchants & Miners' Transportation Co. will increase capital stock from \$100,000 to \$1,000,000.

Cumberland—Coal Mines.—Henry A. Parr, T. Edward Hambleton, L. R. Coates and others of Baltimore, Md., who previously purchased coal properties in Allegany county, Maryland, and Somerset county, Pennsylvania, and opened up three mines with output of 250 tons per day, have completed organization of the Cumberland Basin Coal Co., with capital stock of \$1,000,000, for developing the property, which consists of 3,000 acres; new mines will be opened up for increasing output to 500 tons per day. Fire-clay deposits have also been found on the property, which will be developed for manufacture of brick. Directors of company include Henry A. Parr, T. Edward Hambleton, Frank A. Furst, L. R. Coates, J. O. Stafford and others, all of Baltimore; Thos. F. McGlone, Baltimore, president, and J. O. Stafford, Baltimore, secretary.

Cumberland—Furnaces, etc.—N. & G. Taylor Company, Philadelphia, Pa., is making extensive additions to its mills at Cumberland, as recently reported, which include new open-hearth furnaces with necessary producer equipment, handling and charging apparatus, etc. General improvements are being made throughout the works, which will add materially to capacity of the plant.

Cumberland—Bridges.—Allegany county commissioners and Mineral county (West Virginia) commissioners have decided upon construction of \$10,000 bridge over Potomac river at Cumberland and \$14,000 bridge over Potomac at Piedmont, W. Va.

Iron Hill—Separator Plant.—Lewis J. Grubb of Philadelphia, Pa., will erect separator plant at Iron Hill for the dairymen located in that vicinity.

Pylesville—Cannery, etc.—Pylesville Trading Co. has been incorporated, with capital of \$16,000, by James B. Stansbury, J. Henry Lanus, Willard G. Rouse and others, for conducting general canning and milling business.

Washington, D. C.—Railroad Tunnel.—Pennsylvania Railroad Co. has amended plans for its tunnel, which is to serve as an approach to the proposed union station; instead of two single-track tunnels side by side, with division wall between, the new plan contemplates single double-track tunnel; Wm. H. Brown, chief engineer.

#### MISSISSIPPI.

Centerville—Oil Mill.—Centerville Cotton Oil Co. has increased capital from \$40,000 to \$50,000.

Crystal Springs—Brick Works.—Company has been organized for manufacture of brick. Address Homer Rhymes.\*

Greenville—Mercantile.—Chartered: Goyer Company, with capital of \$250,000, by John R. Pepper and others.

Hattiesburg—Creosote and Turpentine Plant.—J. A. Carr & Bro., recently reported as erecting plant for manufacturing creosote, turpentine, tar, charcoal, etc., have incorporated the Mississippi Naval Stores Co., with capital of \$50,000.

Indianola—Oil Mill.—W. E. Ringold, W. H. Crothers, R. P. Miller, W. T. Plitts, P. C. Chapman and others are incorporators of the Planters' Cotton Oil Co., reported recently as incorporated for erection of cottonseed oil mill.\*

Jackson—Land Improvement.—Mississippi Land & Improvement Co. has been incorporated, with capital of \$50,000, by Wirt Adams, A. M. Nelson, W. Q. Cole and others, for dealing in timber lands, etc.

Jonestown—Cotton-oil Mill.—Jonestown Cotton Oil Co., reported recently as incorporated with capital of \$50,000, has completed organization and elected W. R. Sadler, president; E. M. Wise, vice-president; George Richberger, secretary-treasurer. Contract for erection of building has been awarded A. Eberhart of Memphis, Tenn.

Jonestown—Spoke Factory.—W. R. Sadler, E. M. Wise, George Richberger and associates will organize \$20,000 company for erection of spoke factory.

Mississippi City—Navigation.—Clifton Navigation Co. has been incorporated, with capital of \$15,000, by G. B. Alexander, J. H. Lang, J. D. Miller and others.

Pickens—Water-works.—City has issued bonds for construction of system of water-works; Kirkpatrick & Johnson, engineers, Jackson, Miss.

Quitman—Printing.—Quitman Printing Co. has been incorporated, with capital of \$10,000, by C. F. Thompson, F. W. Pettibone, S. H. Terral and others.

Quitman—Lumber Mill.—Yarborough Lumber Co. has been incorporated, with capital of \$30,000, for manufacture of lumber, by W. H. Senger, T. D. Taylor, E. L. Sterling and others.

Sardis—Timberland Development.—C. M. Carrier & Son have purchased and will develop 30,000 acres of timber lands in Paulina county, and will extend railroad and expend about \$300,000 in developing the property.

Tupelo—Sewerage and Water-works.—City has voted issuance of \$60,000 of bonds for construction of water-works and sewerage. Address "The Mayor."

Utica—Lumber Mill and Ginnery.—Utica Lumber & Gin Co. has been incorporated, as recently reported, with capital of \$10,000, by R. B. Latimore, E. H. Currie, F. J. Kelley and others.

Yazoo City—Electric Plant, Sewers and Water-works.—Kirkpatrick & Johnson, engineers, Jackson, Miss., have prepared plans for water-works, comprising about twelve miles of mains; system of twelve miles of sewers and electric-light plant of about 300-kilowatt generators, with boilers, engines, pumps, buildings, etc., for Yazoo City. Date for letting of contracts will be announced in about thirty days.

#### MISSOURI.

Cape Girardeau—Ice Factory.—F. W. Morrison, 334 Hartford street, St. Louis, Mo., will, it is said, erect 15-ton ice factory at Cape Girardeau.

Harwood—Telephone System.—Harwood Telephone Co., reported recently as incorporated, will construct telephone system, and has made no contracts for machinery or supplies.

Houston.—Chartered: Millard Ginseng Co., with capital of \$100,000, by Thomas F. Millard, Homer Millard, L. N. Smith and others.

Kansas City—Lumber Company.—Martin Lumber Co. has been incorporated, with capital of \$25,000, by A. J. Martin, Samuel T. Carl, Yancy J. Martin and others.

Louisiana—Cement Plant.—Charles I. Harmon, Geo. W. Rathman, W. P. Heron and J. C. Elston of Chicago, Ill., are interested in establishment of cement plant at Louisiana.

Rich Hill—Electric-light, Gas and Water Plants.—City has awarded contract to Guido Jaeger for improvements to the electric-light plant, gas plant and water-works; Improvements include steel tank for water-works, new dynamo for electric plant, etc.

St. Louis—Bottling Works.—O. Zo-Aqua Co. has been incorporated, with capital of \$50,000, for manufacture of health promoting beverages, by R. P. McConnell, J. R. S. Nichols and T. A. Gibney.

St. Louis—Mercantile.—Chartered: Foster Mercantile Co., with capital of \$15,000, by James H. Foster and others.

St. Louis—Mining and Milling.—Point Mining & Milling Co., with capital of \$5000, has been incorporated by Wm. A. Buddecke, Wm. R. Macklind, Wm. R. Straup and others.

St. Louis—Chartered: Cook Hotel & Excursion Co., with capital of \$150,000, by C. L. Spooner and others.

St. Louis—Roller Company.—Chartered: St. Louis Roller Co., with capital of \$2000, by S. M. Carter, Wm. Brown, M. F. Bingham and others, to manufacture printers' rollers and supplies.

St. Louis—Printers' Rollers, etc.—Chartered: Crutsinger Company, with capital of

\$25,000, for manufacture of printers' rollers and supplies, by J. J. Wehril, Wm. Brown, D. M. Carter and others.

St. Louis—Mercantile.—Chartered: H. M. Smith Produce Co., with capital of \$25,000, by H. M. Smith and others.

St. Louis—Medicine Company.—Dr. Charles Leslie Medicine Co. has been incorporated, with capital of \$2500, by H. C. Peters, Wm. E. Linck and others.

St. Louis—Electric Chair Company.—Chartered: Electric Chair Co., with capital of \$75,000, by Semple Scott, G. A. Brecht, E. A. Faust and others.

St. Louis—Orchard Company.—United Orchard Co. has been incorporated, with capital stock of \$1,500,000, by J. G. McNair, L. G. McNair, F. R. Harris and others.

St. Louis—Safety-pin Factory.—Lock Safety Pin Co. has been incorporated, with capital of \$300,000, by David R. Calhoun, Frank Casey, George Morton and others for manufacture of safety pins.

St. Louis—Realty Company.—Chartered: Witherspoon Realty Co., with capital of \$24,000, by S. J. Nicolls, M. C. Williams, D. R. Williams and others.

St. Louis—Quarrying.—Merramec Quarry Co. has been incorporated, with capital of \$50,000, by Albert Fisher, John C. Finck, Frank Jennings and others.

St. Louis—Brewery.—American Brewing Co. has increased capital stock from \$300,000 to \$1,250,000, and will expend \$75,000 for betterments. E. C. Jensen is the architect.

St. Louis—Amusement Company.—Chartered: American Amusement Co., with capital of \$12,000, by Edward H. Robinson, Arthur F. Devereux, Andrek De Kreko and others.

St. Louis—Wallpaper and Fresco Company.—Chartered: J. L. Isaacs-Hey Wallpaper & Fresco Co., with capital of \$5000, by J. L. Isaacs, David Hey and others. Address 908 North Grand avenue.

St. Louis—Realty Company.—Chestnut Realty Co. has been incorporated, with capital of \$50,000, by Mathew T. Chestnut, Alfred H. Annan and others.

Sullivan—Fence Company.—Sullivan Fence Co. has been incorporated, with capital of \$5000, by O. L. Patterson, Z. C. Logan and O. C. Thayer.

#### NORTH CAROLINA.

Asheboro—Cannery.—Elijah Moffitt will establish cannery.

Asheville—Construction.—Blue Ridge Construction Co. has been incorporated, with capital of \$10,000, by R. H. Cosby, J. M. Lorick and G. Francis Smith.

Charlotte—Land Improvement.—Chatham Park Land Co. has been incorporated, with capital of \$100,000, for dealing in and improving real estate, erection of buildings, etc., by H. G. Chatham, Elkin, N. C., and others.

Fayetteville—Gas and Electric Plant.—Fayetteville Gas & Electric Co. has been incorporated, with capital of \$32,000, by E. Leslie Bash, John Pierce Brune, Archibald D. Taylor, Wm. H. Bosley of Baltimore, Md.; C. W. Broadfoot, Henry C. Bash of Fayetteville and others, for operating gas and electric plant of Fayetteville Gas Co., previously reported.

Flat Rock—Knitting Mill.—Incorporated: Hart Knitting Mill Co., capitalized at \$50,000, by P. H. Hart of Flat Rock and F. G. Hart of Hendersonville, N. C.

Greensboro—Refrigerator Factory.—C. V. Hill of Trenton, N. J., manufacturer of refrigerators, will, it is said, establish branch factory at Greensboro.

Hendersonville—Land Improvement.—Geo. W. Valdehl of New York will, it is reported, expend \$1,000,000 in building a village between Hendersonville and Brevard, about thirty miles from Asheville.

Hertford—Lumber Company.—Albemarle Co. has been incorporated, with capital of \$100,000, by A. T. Holmes of Washington, N. C.; J. J. Fleetwood of Hertford and others.

Jamestown—Cotton Mill.—Oakdale Cotton Mills will increase capital from \$50,000 to \$100,000.

Kings Mountain—Cotton Mill.—Enterprise Mills will add 200 spindles and other machinery.

Spray—Textile Mills.—It is rumored that Ladshaw & Ladshaw of Spartanburg, S. C., will prepare plans and specifications of buildings for the textile mills reported last week as to be built by B. Frank Mebane and associates. It is also rumored that Fred Viotor & Achells of New York represent the German capitalists who are said to be interested.

Washington—Steamboat Company.—Black Star Line Steamboat Co. has been incorporated, with capital of \$100,000, by E. L. God-

frey of Washington, A. H. Redmon and Roshi Redmon of Kalamazoo, Mich.

Washington—Fishing Company.—Pamlico Fishing Co. has been incorporated, with capital of \$125,000, by R. F. Garner, W. K. Jackson, R. C. Eberhardt and others.

Wilmington—Building-material Factory.—Wilmington Stone & Construction Co., recently reported as incorporated with capital of \$20,000 to manufacture concrete hollow building blocks, has completed organization with Wm. F. Robertson, president; Walker Taylor, vice-president; H. E. Bonitz, secretary-treasurer, and S. P. Adams, general manager. Active operations will be commenced shortly.

Wilson—Distillery.—George T. Morgan will erect distillery.

#### SOUTH CAROLINA.

Bennettsville—Machine Shop, Foundry and Planing Mill.—Pee Dee Machine Co., whose plant was recently burned, will organize company with capital of \$10,000 for rebuilding the plant, which will include planing mill, machine shop and foundry. Address W. P. Breeden, Jr., manager.\*

Charleston—Cement Works.—Carolina Portland Cement Co. has increased capital from \$50,000 to \$200,000.

Charleston—Woodworking Factory.—Charleston Door, Sash & Lumber Co. has increased capital from \$20,000 to \$50,000.

Charleston—Telegraph Company.—American District Telegraph Co. has been incorporated, with capital of \$25,000, by Geo. H. Fearons and Belvidere Brooks of New York.

Darlington—Electric Plant and Water-works.—Darlington Light & Water Co. has contracted for improvements to cost \$10,000, and will later on still further enlarge and improve its plants at cost of \$10,000 additional.

Edgefield—Mercantile.—Chartered: Edgefield Mercantile Co., with capital of \$25,000, by F. L. Timmerman and others.

Florence—Jewelry Company.—Chartered: Sulzbacher-Peck Jewelry Co., with capital of \$15,000, by Isaac Sulzbacher, S. I. Sulzbacher and C. H. Peck.

Florence—Ice Factory.—O. G. Weston is president; L. H. Wares, vice-president, secretary and treasurer of the Phoenix Ice Co., reported lately as incorporated with capital of \$10,000.

Georgetown—Cotton-oil Mill.—F. Rhem, M. Moses, W. D. Morgan and others are organizing company for erecting cottonseed-oil mill; capital \$30,000. Address W. D. Morgan.\*

Laurens—Cotton-oil Mill.—Company will be organized for establishing cottonseed oil mill. Address W. J. Joiner.

Lumber—Lumber Mill.—Ernest Williams of Lynchburg, Va., and associates, who were recently reported as having purchased lumber mills of Bridges-McKeithan Lumber Co. at Lumber, and to operate same, have incorporated as the Williams & McKeithan company, with Ernest Williams, president; D. T. McKeithan, vice-president; J. M. Barr, secretary.

Marion—Cotton Gin and Brick Plant.—Chartered: O. C. Fore Ginning & Manufacturing Co., with capital of \$10,000, for ginning cotton and manufacturing brick, by O. C. Fore, W. G. Pace and W. W. Holland.

Rock Hill—Power Company.—Catawba Power Co. has increased capital stock from \$50,000 to \$750,000 for completion of its electric-power plant.

Roebuck—Oil Mill.—J. L. Foster, J. A. Foster, D. W. Switzer, E. F. Parker and others have incorporated \$15,000 company for erection of cottonseed-oil mill.

Ruby—Oil Mill.—D. H. McGregor and associates are interested in formation of company to erect cottonseed-oil mill.

Spartanburg—Publishing.—J. Conway Garlington has purchased the Carolina Spartan and organized the Garlington Publishing Co., with capital of \$5000, for publishing same.

Stono—Mining.—Stono Mining Co. has been incorporated, with capital of \$50,000, for conducting general mining business, by J. L. Perry, J. Ross Hanahan and J. A. Hertz.

#### TENNESSEE.

Chattanooga—Planing Mill.—King-Baxter Lumber Co. has increased capital to \$12,000, as previously reported, for further enlargement of its planing mill.

Chattanooga—Woodworking Factory.—Charles E. Forstner and L. E. Phillips, who recently purchased factory of Chickamauga Manufacturing Co., will operate same on an enlarged scale, erecting new warehouse and installing additional machinery for doubling capacity in manufacture of crates, berry boxes, butter firkins and baskets, and will later on add manufacture of excelsior. Plant



will be operated as the New Chickamauga Manufacturing Co., to be incorporated with capital of \$100,000.

Columbia—Mining.—Flat-Top Mineral Co. has been organized for conducting general mining business, by Percy S. Chandler, Frank Cummings, R. H. Lee and E. Dan Smith.

Columbia—Milling.—Chartered: Marshall & Maury Milling Co., by J. R. Wilhoite, J. B. Wilhoite, J. S. Morris and others.

Crab Orchard—Stone Quarries, Brick Works, etc.—Cumberland Stone Co. has been incorporated for quarrying stone, manufacturing brick, cement, etc. C. H. Young is president, and H. C. Sabine, secretary-treasurer.

Erin—Telephone System.—Clarksville Home Telephone Co. and Houston County Telephone Co. have consolidated, and will operate under one management as Clarksville Home Telephone Co.

Jackson—Telephone System.—Home Telephone Co., Memphis, Tenn., will build line from Jackson to Humboldt.

Jellico—Hardware Company.—Chartered: Jellico Hardware Co., with capital of \$40,000, by A. J. Beever, Richard Baird, S. W. McComb and others.

Johnson City—Street Improvements, etc.—City has voted issuance of \$25,000 of bonds for improvement of streets and school buildings recently reported; no contracts have been awarded; J. W. Crumley, mayor.

Knoxville—Coal Mines.—Royal Coal Co. is making improvements at its mines at cost of \$50,000, which include installation of compressed-air plant and erection of additional buildings.

Lexington—Educational.—Chartered: Lexington Normal School and Commercial College, by J. M. Arnold and others.

Mayland—Nursery.—Cumberland Nursery Co. has been organized, with capital of \$10,000, by D. S. Pope, Wm. Cooper and T. A. Pope.

Memphis—Cold-storage Warehouse.—S. M. Williamson is erecting cold-storage warehouse.

Memphis—Water-works.—City has completed purchase of the plant of Artesian Water Co., previously reported. Address "The Mayor."

Memphis—Stove and Range Company.—Fox & McLendon Stove Co., Tennessee Stove & Range Co. and Vance Hardware Co. of Chattanooga, Tenn., have consolidated and will operate as the Memphis Hardware & Stove Co. at 265 Main street. Officers of company will be J. C. Vance, president; H. K. Vance, vice-president; Geo. S. Fox, secretary, and C. L. Harris, treasurer.

Nashville—Sewer.—Contract has been awarded Foster & Creighton at \$10,000 for construction of sewer, which will be an extension of the Lick Branch sewer.

#### TEXAS.

Alta Loma—Cannery.—Company has been organized for establishing fig-preserving factory. Secretary Business League may be addressed.

Austin—Bridges.—Q. C. Horton has contract at \$17,744 for construction of four bridges in Williamson county.

Clawson—Lumber and Shingle Mills.—Chartered: Henderson Land & Lumber Co. has been incorporated, with capital of \$40,000, for manufacture of lumber and shingles, by J. A. Kurth, A. J. Peavy, Eli Wiener and F. Kavanaugh.

Corsicana—Cotton Mill.—T. M. Stroud Manufacturing Co. has been incorporated, with capital of \$25,000, by T. M. Stroud, H. C. Ballew and W. B. Barnes, for manufacture of cotton and woolen goods.

Elgin—Water-works.—McGriffin & O'Neal of Dallas, Texas, have contract at \$16,200 for construction of water-works previously reported.

El Paso—Sewers and Street Improvements.—City will hold election to vote on issue of \$80,000 of bonds for sewers and \$20,000 for street improvements. Address "The Mayor."

Georgetown—Electric Plant and Water-works.—Georgetown Water-Works & Electric Co. will expend \$10,000 in improvements.

Glen Flora—Irrigation.—Chartered: Kinchell Irrigating Co., with capital of \$75,000, by David Diekey, F. W. Bulloch and C. H. Waterhouse.

Gonzales—Mercantile.—Chartered: J. M. Power Company, with capital of \$1000, by J. M. Power and others.

Gonzales—Oil Wells, etc.—Gonzales Oil & Development Co. has been incorporated, with capital of \$25,000, by J. W. Nixon, R. S. Dilworth, T. F. Harwood and others.

Houston—Oil Company.—Adelaide Oil Co. has been incorporated, with capital of \$20,000,

by H. P. McLaughlin, H. P. C. Brown of Houston and J. S. Wheelless of Beaumont.

Marlin—Water-power Development.—J. A. Martin and B. C. Nettles are investigating the practicability of developing the power of the falls of Brazos river with a view to generating electricity for lighting and manufacturing purposes.

Paris—Mercantile.—Chartered: Paris Mercantile Co., with capital of \$10,000, by Robert L. Reid and others.

Paris—Mercantile.—Chartered: Clark & Howe Co., with capital of \$25,000, by Wylly Clark, Otis Howe and others.

Plainview—Hardware Company.—Plainview Hardware Co. has been incorporated, with capital of \$10,000, by W. Boin, L. E. Speed and W. P. Herbert.

Plano—Ice Factory.—Plano Milling Co. is erecting 20-ton ice plant, and has awarded contract for equipment.

San Saba—Irrigation Plant.—Texas and other parties, including E. B. Coon of Cincinnati, Ohio, have organized \$250,000 company for building extensive irrigating ditches and dams in San Saba county for irrigating lands six miles wide and twenty-five miles long; dam, which has partially been constructed at cost of \$10,000, is to be enlarged and otherwise improved.

Santa Anna—Flour Mill.—Company has been organized, with capital of \$10,000, for erection of 75-barrel flour mill. Address P. R. Roberts.

Sour Lake—Tool Company.—Sour Lake Tool Co. has been incorporated, with capital of \$15,000, by J. F. Maxwell, J. W. Sloan and J. A. McVeigh.

Sulphur Springs—Water-works.—City will expend \$20,000 in extending water system. Address "The Mayor."

Temple—Electric-light Plant.—It is reported that the Atchison, Topeka & Santa Fe Railway Co. will equip its roundhouse at Topeka with an electric-lighting system; H. U. Mudge, general manager, Topeka, Kan.

Victoria—Creamery.—C. A. Chastang will establish creamery.\*

Wolf City—Milling.—Medlin Milling Co. has increased capital to \$50,000.

#### VIRGINIA.

Berkley—Dredging.—W. D. French Wrecking Co. of Berkley has contract for dredging 20,000 cubic feet of mud from Appomattox river.

Cave Spring—Distillery.—C. N. Hutcherson will establish whiskey distillery.

Emporia—Cotton Mill.—Northern and local capitalists will build a cotton mill. Site has been secured; water-power will be developed. Names of interested parties not stated as yet.

Emporia—Furniture Factory.—Company has been organized, with capital of \$50,000, for erecting furniture factory. W. S. Goodwyn is president; H. W. Hall, vice-president, and Samuel Coffin of Durham, N. C., general manager.

Lynchburg—Water Supply.—City will vote June 13 on issue of \$700,000 of bonds to furnish gravity supply of water from Pedlar river in Amherst county. Plan contemplates construction of 60-foot dam and about twenty-two miles of water pipe, nineteen miles of 36-inch wood stave, two miles 30-inch cast-iron and one mile of 30-inch riveted steel. No contracts have been awarded. Mention has been made several times of proposed construction of gravity system. Address H. L. Shaner, city engineer.

Manchester—Machine Works.—Southern Machine Manufacturing Co. has been incorporated for conducting machine shop by A. C. Goode, F. A. Warren, W. D. Lenke, W. A. Becker and others.

Martinsville—Electric-power Plant.—City has granted franchise for electric-light and power plant to Smith River Electric Light & Power Co., recently organized with capital of \$50,000 and Pannill Rucker, president. Company has acquired water-power on Smith river near Martinsville, and will construct 20-foot dam and build plant for supplying city with light and power for manufacturing purposes, developing 500 horse-power.\*

Newport News—Heating, etc., Company.—Chartered: Newport News Plumbing, Heating & Tinning Co.

Norfolk—Real Estate.—Chartered: Willoughby Bay Corporation, for dealing in and improving real estate, by T. H. Wilcox, Abbott Morris, H. L. Smith and J. W. Perry.

Norfolk—Realty Company.—Chartered: McCulloch Realty Co., by T. H. Wilcox, W. W. Stark, S. W. Pannill and J. W. Perry.

Norfolk—Stone Works.—J. C. Plaine of Crimora, Va.; David Nail and Thomas Lerner of Staunton, Va., will establish works at Norfolk for manufacture of artificial stone from cement and sand.

Petersburg—Builders' Supply Company.—Chartered: Petersburg Builders' Supply Co.

Richmond—Drug Company.—Shoekoe Drug Co. has amended charter, changing name to Vaughan-Robertson Drug Co.

Richmond—Coal Mines.—Pocahontas Company has been incorporated, with capital stock of \$500,000, for developing coal property in Augusta and Rockingham counties. Edgar Madden, Wm. H. Hall, John C. Ward, M. Yorks and E. W. Mills are incorporators. Address company at 1014 East Main street.

Roanoke—Real Estate.—Roanoke Real Estate Exchange has been organized with J. W. Boswell, president; C. M. Armes, vice-president, and Claude M. Speese, secretary-treasurer.

Salem—Water-works.—City will make improvements for increasing water supply. Address "The Mayor."

West Point—Package Company.—Chesapeake Package Co. will enlarge and increase output of plant.

#### WEST VIRGINIA.

Charleston—Oil Wells.—Grant P. Hall, Benjamin Baer, E. W. Stanton, W. M. O. Dawson, all of Charleston, and associates, have incorporated the Par-Char Oil Co., with capital of \$100,000.

Charleston—Brewery.—Chas. Weyland and associates of Pittsburg, Pa., have completed arrangements for erection of the \$250,000 brewery at Charleston, previously reported.

Charleston—Building-material Factory.—Charleston Building Block Co. has been incorporated to manufacture building blocks of cement and other material, brick, etc., with capital of \$25,000, by H. B. Smith, D. C. Doyle, R. P. Flournoy, E. W. Evans and others.

Charleston—Pumping Station and Power Plant.—Kanawha Water & Light Co. has let contract for its proposed pumping station and electric-power plant to A. F. Withrow & Co.

Clarksburg—Crematory.—City has contracted with Dixon Garbage Crematory Co. of Toledo, Ohio, for installation of crematory.

Clarksburg Water-works.—City will expend several thousand dollars in erecting tanks, extending mains, etc. Address "The Mayor."

Elkhorn—Coal Mines.—Thacker Coal & Coke Co. has increased capital stock from \$300,000 to \$600,000.

Fairmont—Coal Mines.—Wabash & Potomac Coal Co. has been incorporated, with capital of \$100,000 for development of coal mines, by C. E. Conaway of Fairmont, B. F. Overholt of Scottsdale, Pa.; J. F. Cockey, Jr., Baltimore, Md., and others.

Fairmont—Flour Mill.—Miller-Clarke Grain Co. has purchased and will operate Mountain City Mill at Fairmont.

Fairview—Telephone System.—Consolidated Telephone Co. of Fairmont, W. Va., has purchased Fairview Telephone Co.'s system, and will improve same, installing metallic circuit, etc.

Grafton—Automobile Company.—A. Hood Phillips, A. J. Wilkinson, J. H. S. Barlow and others have organized \$10,000 company for conducting automobile transportation business.

Huntington—Mercantile.—Chartered: B. Pratte Company, with capital of \$50,000, by B. Pratte and others.

Keyser—Worsted Mill.—Incorporated: Patchett Worsted Co., capital \$100,000, by Joseph E. Patchett, F. M. Reynolds, E. B. Reynolds and others, for manufacturing worsted, etc.

Levels—Telephone System.—Levels Telephone Co. has been incorporated, with capital of \$5000, for constructing telephone system, by W. H. Harmon, D. M. Dickend, H. Rounells and others.

Mill Point—Lumber Mills.—Warp Lumber Co. has been incorporated, with capital of \$200,000, for development of timber lands, manufacture of lumber, etc., by W. C. Kelger, W. R. Thomas of Johnstown, Pa.; P. S. Waru of Myersdale, Pa., and others.

Parsons—Hardware Company.—Linger Hardware & Furniture Co. has been incorporated, with capital of \$10,000, by E. C. Linger, Riley Harper, E. A. Hays and others.

Pine Grove—Real Estate.—Smith-Connelly Company has been incorporated, with capital of \$10,000, for dealing in real estate, etc., by J. B. Smith and S. A. Smith of Clarksburg, Claire Connelly of Pine Grove, and others.

Sistersville—Glass Factory.—A Mr. Cleveland of Rochester, Pa., is investigating with a view to establishing plant at new town of Paden City for manufacture of all kinds of glassware.

Spencer—Mercantile.—Chartered: Spencer Grocery Co., with capital of \$50,000, by P. C. Adams and others.

Wheeling—Bridge Company.—Riverside Bridge Co. has increased capital from \$125,000 to \$200,000.

Wheeling—Tool Works.—Warwood Tool Co. will expend about \$30,000 in erection of new plant.

Wheeling—Glass Factory.—Century Glass Co. will make extensive improvements to its glass works.

Wheeling—Water Mains.—J. R. Butt, president water board, has asked for appropriation of \$75,000 for new water mains.

#### INDIAN TERRITORY.

Duncan—Water-works.—W. L. Bumpass, under supervision of Duncan Light & Power Co., has contract for constructing city's proposed \$25,000 water-works system. O. J. Gorman of Dallas, Texas, is engineer.\*

Potomac—Coal Mines.—Perry Frack and other Pennsylvania parties have purchased the Witteville coal mines at Potomac for \$100,000, and will inaugurate extensive developments.

#### OKLAHOMA TERRITORY.

Oklahoma City—Land Improvement.—Baltimore Investment Co. has been organized for dealing in and improving real estate, by R. B. Young of Bonham, Texas; W. C. Richardson of Geary, O. T., and T. M. Richardson, Jr., of Oklahoma City.

Ponca City—Flour Mill.—New London Milling Co. has been incorporated, with capital of \$12,000, by J. C. Raub, E. L. Hopton and E. H. Hurford.

#### BUILDING NOTES.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Abbeville, La.—Office Building.—J. A. Petty has contract for erection of two-story brick and stone building for Abbeville Investment Co.; cost \$30,000.

Augusta, Ga.—Warehouses, etc.—Riverside Mills has let contract to T. O. Brown & Son for construction of warehouses and office building to cost \$25,000.

Baltimore, Md.—Office Building.—Edward H. Glidden has prepared preliminary plans for erection of 10-story brick, stone and terra-cotta office building corner Mulberry and Charles streets. Company is being organized by William T. Levering and associates for erection of this building.

Baltimore, Md.—Residence.—J. E. Lafferty is preparing plans for proposed improvements to residence of Isaac E. Emerson.

Baltimore, Md.—Building.—Phillip Watts has contract at \$6451 for erection of administration building and stable for Troop A at Pikeville.

Baltimore, Md.—Factory Building.—It is reported that company will be organized to take over the old Front Street Theater property, previously reported as having been purchased by James L. Kernan, and erect seven-story factory building, to be operated as furniture plant. Address Charles Knapp.

Baltimore, Md.—Office Building.—McIver & Piel are preparing plans for converting the four-story building at 114 Franklin street into an office building; two stories will be added and other alterations and improvements made. The Apartment Co. has been incorporated, with capital of \$5000, by Dr. Francis M. Chisolm, Henry S. King, Edgar C. Miller and others to take over the property.

Baltimore, Md.—Warehouse.—J. H. Walsh & Bro. have contract for erecting proposed warehouse of E. B. Hunting; cost \$12,000.

Baltimore, Md.—Warehouse.—R. H. Frazier & Son have contract for erecting warehouse previously reported to be built by Arthur and F. H. Brehm.

Birmingham, Ala.—Residence.—J. E. Ware will erect two-story frame dwelling to cost \$4000.

Birmingham, Ala.—School.—C. & H. P. Wheelock have contract for erecting proposed \$12,000 school building for Pollock-Stephens Institute.

Rules Creek, N. C.—Academy Building.—Rules Creek Academy is erecting new building 70x92 feet.

Columbia, S. C.—Club.—Columbia Glass Co., John J. Seibels, president, will erect \$10,000 club.

Columbia, S. C.—Business Block.—J. C. Robertson is having plans made by Edwards & Walter for erection of business block.

Crossville, Tenn.—Hall.—Company is being organized for erection of public hall building 45x60 feet. C. E. Snodgrass may possibly give information.

Dallas, Texas.—Warehouse.—Olive & Myers Manufacturing Co. will erect warehouse, as recently reported, four stories, 50x90 feet, to cost \$15,000.\*

Dallas, Texas.—Hotel.—Plans have been completed and contracts will shortly be awarded for erecting proposed nine-story brick and steel addition to Oriental Hotel.

Danville, Va.—Warehouses.—Report of last week as to Riverside Cotton Mills letting contract for warehouses, etc., was an error. For correct statement see item today under Augusta, Ga.

Darlington, S. C.—Courthouse.—Edwards & Walter of Columbia, S. C., are preparing drawings for courthouse for Darlington county, previously mentioned.

Durham, N. C.—Warehouses.—Board of Trade has arranged for erection of new tobacco sales warehouses.

Durham, N. C.—Warehouse.—Durham Dry Goods Co. has awarded contract to Wilkerson Bros. for erection of tobacco warehouse of wood, 120x210 feet.

Eagleville, Tenn.—City Hall.—City Hall will be erected. Address "The Mayor."

Elizabeth City, N. C.—Hotel.—E. F. Aydtlett has purchased and will remodel the Albemarle Hotel.

El Paso, Texas.—Schools.—City will vote on issuance of \$50,000 of bonds for school purposes. Address "The Mayor."

Fort Caswell, N. C.—Guardhouse and Administration Building.—Philip Yost, A. A. Q. M., Fort Caswell, N. C., will receive sealed proposals in triplicate until June 16 for constructing, plumbing, wiring and heating guardhouse, constructing, plumbing and wiring administration building at Fort Caswell. Information furnished on application. United States reserves usual rights.

Gaffney, S. C.—Bank Building.—A. N. Wood is having plans made by Edwards & Walter of Columbia, S. C., for erection of bank building.

Gaffney, S. C.—Drug Store.—L. Baker has contract for erecting store building of Cherokee Drug Co. after plans by Edwards & Walter of Columbia.

Greenville, S. C.—Business Block.—Jamison Bros. & Morris have contract for erecting proposed business block of C. F. Dill 25x100 feet, and cost \$25,000. Edwards & Walter of Columbia prepared the plans.\*

Greenville, S. C.—Business Building.—Jamison Bros. & Morris have contract for erecting business building for Mrs. Eliza Perkins, 76x120 feet.

Greenville, Texas.—Library.—Carnegie Library will be erected. Address W. A. Williams.

Govanstown, Md.—Church.—Govanstown M. E. Church, Rev. Howard F. Downs, pastor, has had plans made for erection of \$9000 edifice.

Hawkinsville, Ga.—Hotel.—J. Pope Brown is interested in erection of hotel.

Hot Springs, Ark.—City Hall and Auditorium.—Plans of Mr. Russell for proposed city hall and auditorium have been adopted and bids are being asked on erection of same. Address for further particulars Mr. Russell, care of St. Charles Hotel, Hot Springs.

Jackson, Miss.—Hotel.—Company has been organized, with capital of \$80,000, and will arrange at once for erection of hotel. Address Wirt Adams.

Jackson, Miss.—Jail.—Board of supervisors, W. W. Downing, clerk, will receive bids until July for erection of proposed jail building; Hull Bros., architects.

Kansas City, Mo.—School.—J. B. Noevel has contract at \$19,586 for erection of the Hedrick school, for which Charles A. Smith prepared the plans; will be two stories, of brick, with stone trimming, 107x85 feet.

La Grange, Ga.—Courthouse.—C. H. Griffin, chairman board of county commissioners, will open bids June 22 for furnishing material and labor necessary for erection of two-story brick and stone courthouse in accordance with plans and specifications prepared by Andrew J. Bryan & Co., New Orleans, La. Certified check for \$5000 must accompany each bid. Usual rights reserved.

Laurens, S. C.—Rectory.—Edwards & Walter, Columbia, S. C., are preparing plans for rectory for Episcopal congregation.

Laurens, S. C.—School.—Edwards & Walter of Columbia, S. C., have made plans for school building for Laurens Cotton Mills.

Laurens, S. C.—Store Building.—Watts Cotton Mills is having plans made by Edwards & Walter for erection of store building.

Livingston, Texas.—Bank Building.—Citizens' National Bank has let contract to Thos. Veitche of Rosebud, Texas, at \$8000, for erection of its proposed building.

Louisburg, N. C.—Hotel.—Louisburg hotel, recently burned, will be rebuilt. Address G. W. Ford.\*

Lumberton, N. C.—Jail.—County has voted issuance of \$10,000 bonds for erection of jail. Address county commissioners.

Marion, S. C.—School.—City has decided by popular vote to issue \$12,000 of bonds for erection of school building recently reported. Address "The Mayor."

McComb, Miss.—School.—L. W. McDaniel has contract for erecting proposed \$30,000 school building.

Montgomery, Ala.—Schools.—Ordinance has been introduced in city council providing for election to be held July 20 to decide issuance of \$50,000 of bonds for enlargement of city schools. Address Secretary board of education.

Morganton, N. C.—Courthouse.—Frank P. Milburn of Columbia, S. C., will prepare plans for remodeling Burke county's courthouse.

New Decatur, Ala.—Hotel.—The Tavern (hotel) owned by Decatur Land Co. and reported damaged by fire to extent of \$15,000 will be repaired at once.

New Holland, Ga.—Church.—Edwards & Walter of Columbia, S. C., have completed plans for church building for Paolet Manufacturing Co.

Norfolk, Va.—Hotel.—Gladstone Hotel will be improved at cost of \$18,000.

Norfolk, Va.—Library.—E. Tattersone has contract for erecting proposed Carnegie Library, previously reported to be erected at cost of \$50,000.

Oklahoma City, O. T.—Building.—Western Newspaper Union will erect four-story brick building. Address Chas. E. Verity, local manager.

Palmetto, Ga.—School.—Town has voted issuance of \$4000 of bonds for erection of school building. Address "The Mayor."

Raleigh, N. C.—State Capitol.—Legislative committee appointed by last legislature has employed Frank P. Milburn of Columbia, S. C., to prepare plans and specifications for alterations and additions to State Capitol; approximate cost \$300,000.

Rogers, Md.—Station.—Northern Central Railway Co. contemplates erection of station at Rogers, but have not determined on plans, etc.; W. G. Coughlin, principal assistant engineer, Williamsport, Pa.

Savannah, Ga.—City Hall.—Plans which were recently received for erection of proposed City Hall have all been rejected, and new plans will be prepared, probably by H. W. Witcover.

Seneca, S. C.—Hotel.—Edwards & Walter, Columbia, S. C., have made plans for Oconee Inn at Seneca, recently reported; C. H. Ellison, proprietor.

Southern Pines, N. C.—Hotel.—Southern Pines Land & Improvement Co., reported recently as incorporated, has organized for erecting the hotel previously reported to be built by Chas. St. John and associates at cost of \$25,000; W. T. Broxton, building superintendent in charge.

St. Louis, Mo.—Warehouse.—The Crane Company, manufacturer of machinists and plumbers' supplies, has purchased seven-story warehouse and will build an additional seven-story warehouse adjoining 70x120 feet at cost of \$100,000.

St. Louis, Mo.—Warehouse.—Crane & Co. will erect additional warehouse.

Troy, Ala.—Church.—Methodist Episcopal congregation will expend \$20,000 in erection of new church. Address "The Pastor."

Washington, D. C.—Flats Buildings.—Geo. W. Boyd will erect four two-story flats buildings. Barzer & Ross will erect four three-story flats buildings.

Washington, D. C.—Apartment-house.—Jno. W. Points will erect four-story apartment-house.

Washington, D. C.—Apartment-house.—Mrs. Jose Yznaga will erect four-story apartment-house.

Washington, D. C.—Residence.—Byron S. Adams has had plans made by F. R. Pyle for erection of residence.

Washington, D. C.—Apartment-house.—Kalamazoo Apartment House Co. has been incorporated, with capital of \$75,000, for erecting apartment-house, by Frank H. Duehay, Wm. A. Easterday, Chas. R. Duehay and others.

Wheeling, W. Va.—Dwellings.—W. A. Wilson & Son have contract for erecting twenty dwellings at Glenova.

Wheeling, W. Va.—Dwellings.—J. C. McKinley, president of the Mount Coal Co., will receive bids for erection of a number of operatives' dwellings.

Wilmington, N. C.—Hotel.—Pearsall & Co., reported recently as incorporated for conducting real-estate business, is erecting hotel at cost of \$3000, for which H. E. Bonitz drew the plans.\*

Yorkville, S. C.—Hotel.—Edwards & Walter, Columbia, S. C., are preparing plans for hotel for Mrs. C. G. Parrish.

## RAILROAD CONSTRUCTION.

### Railways.

Atlanta, Ga.—The Atlanta & Birmingham Railway Co. (Seaboard Air Line), representing a consolidation of the East & West Railroad and the Chattanooga Terminal Railway, has filed a copy of the merger agreement for the Birmingham extension now being built.

Augusta, Ga.—The survey has been completed for an extension of the Augusta & Aiken Electric Railway from Aiken to Columbia, fifty-one miles. James U. Jackson is president at Augusta.

Augusta, Ga.—The Augusta & Summerville Railroad will, it is reported, build some additional side-tracks. E. G. Mosher is president at Augusta.

Baltimore, Md.—The Baltimore, Chesapeake & Atlantic Railway will, it is reported, build an extension and a new freight yard at Salisbury, Md. Willard Thomson is vice-president and general manager at Baltimore.

Bagdad, Fla.—The Culver Company is reported building a lumber railroad to connect with the Pensacola & Andalusia Railway.

Batesville, Ark.—The Batesville & Jacksonport Railroad Co. has been incorporated to build a line from Batesville to Jacksonport, twenty-two miles. The incorporators are E. K. Butler, H. Devereux, Ernest Neill and N. A. Adler of Batesville, George C. Grove, George B. Sidener and W. A. Mitchell of St. Louis, F. H. Tuttle of Cotter, S. R. Phillips of Newport and Arthur Neill of Little Rock.

Belair, Md.—The Baltimore & Belair Electric Railway Co. has closed an agreement with the United Railways & Electric Co. of Baltimore and with the Baltimore & Harford Turnpike Co., under which an electric railway will be built from the United's terminus at Hamilton avenue to Belair, about seventeen miles. Stevenson A. Williams and others of Belair are interested in the Baltimore & Belair Company.

Birmingham, Ala.—The electric railway to Bessemer, fourteen miles, is completed, and will be put in operation shortly.

Birmingham, Ala.—The Railway Construction Co. has changed its name to the MacAfee Company. W. H. MacAfee is reported as saying that the company has contracts for five miles of road near Trussville, five miles near Coal City, a large cut near Irondale and several miles in the city, all on the Seaboard Air Line.

Chicago, Ill.—The Chicago, Rock Island & Pacific Railway is reported surveying between El Dorado, Ark., and Little Rock, about 110 miles, to connect the Choctaw, Oklahoma & Gulf division with the Arkansas Southern, which is improving and extending its line southward. John F. Stevens is chief engineer of the Rock Island at Chicago.

Chicago, Ill.—The Chicago, Rock Island & Pacific Railway is reported making a survey from the Choctaw, Oklahoma & Gulf to Ada, I. T., about thirty miles. John F. Stevens is chief engineer at Chicago.

Chicago, Ill.—Paul Morton, second vice-president of the Santa Fe system, Chicago; W. S. Eddy, Saginaw, Mich., and S. Weir of New York will, it is reported, build a railroad sixty miles long from Terravagos, Mex., to develop timber lands in which they are interested.

Cleveland, Ohio.—Henry A. Everett writes the Manufacturers' Record denying the report that he is interested in a plan to build an electric railway from Atlanta to Athens, Georgia. Mr. Edward W. Moore, also denies that he is interested.

Davis, I. T.—The Davis & Sulphur Springs Electric Railway is reported to have secured a charter and right of way, and will soon begin construction.

Fort Worth, Texas.—T. L. Eggleston of the Eggleston Mining, Development & Construction Co. of New York, is here preparing to incorporate the Kansas, Oklahoma & Gulf Railway to build from a point on the Missouri, Kansas & Texas Railway, at or near Coffeyville, Kan., on through the Cherokee and Osage nations, and the counties of Pawnee, Payne, Logan, Kingfisher, Blaine, Custer, Washita, Kiowa and Greer to a point on the Fort Worth & Denver Railway near the southwest corner of Collingsworth county, Texas, being about 450 miles.

Grafton, W. Va.—Five construction camps are reported established on the Buckhannon & Northern Railroad (Wabash extension) as follows: No. 1, near Cecil; No. 2, below Matsville; No. 3, near the mouth of Pleasant creek in Taylor county; No. 4, near Grafton Park Station; No. 5, two miles below Grafton on the west bank of the Tygart river.

Greenville, S. C.—The Saluda River Railroad Co., R. E. Johnson, president, is reported to be receiving bids to complete the grade of the Carolina, Knoxville & Western Railroad from Marietta to Riverview, about four miles, and the tie contract is also reported to have been let.

Harrodsburg, Ky.—T. B. Jones & Co. are reported to have the contract for building the Southern Railway extension from Harrodsburg to Danville, nine miles.

Hot Springs, Ark.—Reported that the owners of Mountain Valley Springs will build an electric railway from Hot Springs to that place, fourteen miles.

Houston, Texas.—The Texas & New Orleans Railroad will, it is reported, build a branch from Eunice, La., to the Jennings oil field. E. B. Cushing is engineer maintenance of way, Houston, Texas.

Jackson, Miss.—The Mississippi Investment Co., just organized with Wirt Adams of Jackson as president; Charles Whitecomb of Terre Haute, Ind., vice-president; W. Q. Cole, secretary, and A. Nelson, treasurer, proposes to build an interurban electric railway from Jackson to either Clinton or Madison Station, eight to twelve miles.

Jennings, La.—It is reported that sufficient money has been subscribed to insure the building of an electric railway from Jennings to the Jennings oil field, six miles.

Keyser, W. Va.—The Potomac & Potomac Railroad has begun its location survey from Keyser to Maysville, about thirty miles.

Lake Charles, La.—A survey has been made from Lake Charles to a point on the Texas & Pacific Railway for the proposed Calcasieu & Great Northern road.

Lenoir, N. C.—The extension of the Carolina & Northwestern Railway will be from Freeland, N. C., to the summit of the Blue Ridge, forty-five miles. Construction is already in progress in Wilson's creek gorge, the South Atlantic Construction Co. of Burghin, Carson & Co. and T. J. Snyder & Co., both of Collettsville, N. C., doing this work. Other contracts for about thirty miles of line are to be let about July 1.

Louisville, Ky.—The Louisville & Nashville Railroad is reported to have completed a survey for a branch from Clear Fork to Chenoa, seventeen miles. R. Montfort is chief engineer at Louisville.

Macon, Miss.—Stockholders of the Jackson, Columbus & Northeastern Railroad have been called to meet June 3 to consider plans about construction. Thomas W. Brane of Macon is vice-president.

Maysville, Ky.—John Duley, president, writes to the Manufacturers' Record that the Maysville & Mt. Olivet Traction Co. will build a line about twenty-four miles long from Maysville via Washington, Murphysville and Sardis to Mt. Olivet. The other officers of the company are E. Kenton, first vice-president; A. R. Howard, second vice-president; George W. Dye, third vice-president; W. W. Ball, treasurer, and James W. Fitzgerald, secretary.

Memphis, Tenn.—Lewis & Jennings of Memphis are reported to have a subcontract for eleven miles of new road on the Yazoo & Mississippi Valley line between Yazoo and Swan Lake. They also have part of the work of building second track on the Illinois Central between Memphis and Fulton.

Morehead, Ky.—The Morehead & West Liberty Railroad is reported to have completed a survey into the canal coal fields of Morgan county. E. B. Carr is manager. Four miles of line have been built.

Mountain Home, Ark.—The White River & Mountain Home Railway Co. has been chartered to build a line from Cotter to Mountain Home, twelve miles. The incorporators are C. S. Chaybrook of St. Louis, T. N. Cheno-weth, R. S. Wilson, George W. Keene, W. Howard Brown, James Burke, P. E. Bratton and Sam Wilken of Mountain Home, S. E. Denton and H. C. Browning of Gasville.

Nashville, Tenn.—The Nashville, Chattanooga & St. Louis Railway is reported to have awarded to the Southern Contracting Co. of Ludlow, Ky., a contract to cut down the grade at milepost 29, west of Nashville. About 80,000 cubic yards of earth and 20,000 of stone will be removed.

New Decatur, Ala.—It is reported that the proposed Helena, Tupelo & Decatur Railroad will soon be built. George A. Nelson of New



Decatur, J. J. Van Horn of New York and others are reported interested.

New Orleans, La.—The St. Louis & San Francisco Railroad is reported to have completed plans for its freight and passenger terminal, the freight storage and switch yards to have forty-eight tracks with 6000 cars capacity.

Oklahoma City, Okla.—The Missouri, Kansas & Oklahoma has, it is reported, finished half the grading between Oklahoma City and Ada, I. T., about seventy miles.

Paducah, Ky.—The Toledo, New Orleans & St. Louis Railroad Co., reported to be a Wabash plan, has proposed to make Paducah a terminal. N. M. Burns is president, and E. B. Green, chief counsel. They addressed the Commercial Club, which has appointed a committee on the proposition.

Palestine, Texas.—Concerning the report that the International & Great Northern Railroad is making a survey between Waco and Georgetown, the Manufacturers' Record is officially informed that the company will build the line eventually, but not in the near future.

Portsmouth, Va.—The Seaboard Air Line will, it is reported, extensively improve its freight yards at Jacksonville, Fla., doing considerable grading and laying new tracks. W. W. Gwathmey is chief engineer at Portsmouth, Va.

San Antonio, Texas.—The San Antonio & Arkansas Pass Railroad will, it is reported, build an extension from Alice to Brownsville, about 140 miles. M. D. Monserete is vice-president and general manager at San Antonio.

Savannah, Ga.—The Central of Georgia Railway has been granted an amendment to its charter to build a branch from near Missionary Ridge through McFarland's Gap to Cloud Springs, two and one-half miles. H. M. Steele is chief engineer at Savannah.

Savannah, Ga.—The Atlantic Coast Line will, it is reported, build a branch from milepost 230 to Cohn & Co.'s plantation in Decatur county. T. S. Tutwiler is assistant chief engineer at Savannah.

Savannah, Ga.—The Central of Georgia Railway is reported to have purchased 350 acres of land near Atlanta, a large part of which will be used for switching yards. H. M. Steele is chief engineer at Savannah.

Savannah, Ga.—The Sylvania Railroad, which will, it is reported, build an extension through Burke county, has been reorganized with the following officers: President, Mills B. Lane, Savannah, Ga.; treasurer, W. M. Hobby; secretary, H. Wiley Johnson.

Scranton, Miss.—The electric railway has been completed from Scranton as far as Pascagoula.

Staples, Texas.—The Staples Mercantile Co., of which T. L. Griffin is president; J. Mote, vice-president, and H. B. Blair, secretary, writes the Manufacturers' Record that it is preparing to organize a stock company to build a railway from Seguin to Lockhart via Staples, about thirty miles, and possibly to Austin, a total distance of sixty miles, and would like to correspond with persons interested in building railroads.

St. Joseph, Mo.—The incorporators of the St. Joseph, Parkville & Kansas City Railway, recently chartered to build from St. Joseph to Kansas City, about sixty miles, are Geo. W. York of Cleveland, Ohio; Martin A. Davit of Chicago, John J. Tootle, Charles F. Enright, A. J. Enright, Randolph M. Davis, Armstrong B. Weakley of St. Joseph, Mo.; Howard B. McAfee of Parkville, Mo.; E. W. Snyder of Leavenworth, Kan., and James L. Brown of Kansas City, Kan.

St. Louis, Mo.—The report that the Missouri, Kansas & Texas Railway is surveying from Guthrie, Okla., via Kingfisher, Watonga and Arapahoe to Amarillo Texas, is officially denied.

St. Louis, Mo.—A. W. Newton, superintendent of construction Burlington route, writes the Manufacturers' Record that the extension from Old Monroe, Mo. to Mexico, Mo., sixty-three miles, has been located and contracts let. Construction will begin within ten days; maximum grade .5 per cent., maximum curvature 1 degree, and about 80 per cent. tangent on the line. The Stubbs Johnson Construction Co. will, it is reported, do the work.

St. Louis, Mo.—Track is reported complete on the Missouri Pacific's White River extension as far as Buffalo City, 100 miles north of Batesville, Ark., and the grading has been finished as far as Cotter, twelve miles beyond Buffalo City. Some grading has also been done through the Ozark mountains.

Tallahassee, Fla.—The Jacksonville & Tampa Bay Improved Railroad Co. is to be incorporated by a bill which has passed the senate.

Tallahassee, Fla.—The senate has passed a bill granting land to the Apalachicola Northern Railroad Co., which is to build from River Junction, Fla., to Apalachicola, Fla., about seventy miles. H. O. Clement of Valdosta, Ga., is vice-president.

Thibodaux, La.—The New Orleans & Southwestern Railroad Co. has voted to increase its capital from \$1,500,000 to \$4,000,000 for the purpose of building its projected interurban electric line. C. T. Young is general manager and chief engineer at Thibodaux.

Tucson, Ariz.—Ex-Governor Murphy will, it is reported, build a railroad from Tucson to Cape Lobos, on the Gulf of California in Mexico, about 175 miles. Albert C. Bass is also interested.

Washington, D. C.—Reported that the Southern Railway will double-track its line from Chattanooga, Tenn., to Ooltewah, about twenty miles. W. H. Wells is engineer of construction at Washington.

Washington, D. C.—Grading on the Washington, Baltimore & Annapolis Electric Railway is reported about half completed. Headquarters of the company are at the Bond Building.

Waterproof, La.—The Memphis, Helena & Louisiana Railroad (Missouri Pacific system) has laid track from Clayton, La., where it joins the New Orleans & Northwestern, to Waterproof, whence it will proceed north via Tallulah.

Wheeling, W. Va.—George I. and John H. Garrison and Platoff Zane of Wheeling and Charles E. Hasford of Butler, Pa., who propose to build an electric railway from Wellburg to Bethany, W. Va., are reported to be securing estimates for construction and equipment.

#### Street Railways.

Charleston, W. Va.—The franchise asked by the Kanawha Water & Light Co. from the city council is to build an extensive line of street railways across the city.

Frankfort, Ky.—The Frankfort & Suburban Railway Co. has been authorized to build an extension.

Rome, Ga.—Construction work is reported begun on the electric railway extension to Lindale. Charles N. Fuller is superintendent of construction. Other extensions will, it is reported, be made.

Waco, Texas.—The city council has granted the Citizens' Railway Co. a franchise over the suspension bridge.

#### Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

Artesian Well.—Mayor, Biloxi, Miss., will open bids June 5 for one eight-inch well, with option of two wells, about 90 feet deep.

Automobiles.—Knoxville Automobile Co., Knoxville, Tenn., will contract for a number of automobile coaches for transportation purposes.

Boiler and Engine.—Southwestern Insane Asylum, San Antonio, Texas, wants boiler, engine and dynamo; also heating plant overhauled.

Boiler and Engine.—See "Hoisting Equipment."

Brick Machinery.—Homer Rhynes, president Young Men's Business League, Crystal Springs, Miss., wants addresses of manufacturers of brick machinery.

Bridge Construction.—Sealed proposals will be received by board of bridge commissioners, Pikeville, Ky., until June 30 for building of the sub and superstructure and approaches for steel, Howe truss and stone arch bridge to be built over Stone, Coal, Toltets and Buckley's creeks, in Pike county. Bidders must make prices upon each piece of work separately. Complete plans and specifications will be on file on and after June 15 in office of W. O. B. Ratliff, county judge, and office of Leete & McDyer, engineers, Catlettsburg, Ky. Certified check for \$500 must accompany each bid. Usual rights reserved.

Building Material.—Kosciusko Oil Mill & Fertilizer Co., Kosciusko, Miss., is in market for sixty squares of ready roofing.

Building Material.—Barnes & Flowers, Fremont, N. C., want building materials, including columns, sills, girders, ventilators, wrought-iron anchors, caps, shutter eyes, galvanized skylights, glass for front, etc.

Building Materials.—Louisville Coliseum Co., Louisville, Ky., will need structural and ornamental iron and steel work.

Building Materials.—G. W. Ford, Louisville, N. C., wants bids on plate glass for front, window sash, blinds, steel girders, asphalt fireproof roofing and other kinds of roofing, lime, cement, etc.

Building Materials.—Pfaff, Ringwald & Smith, Charleston, W. Va., want hydraulic and Portland cement.

Building Materials.—Jamison Bros. & Morris, Greenville, S. C., want cornices and glass.

Building Supplies.—See "Elevator."

Burglar Alarm.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will open bids June 15 for installation and maintenance of an electric burglar alarm device on certain vaults and safes in United States Treasury Building, which device must be connected with a central station in the city. Copy of general information regarding service required, etc., may be obtained upon application to supervising architect.

Button Machinery.—C. L. Rice, Mt. Olive, Miss., wants addresses of manufacturers of machinery for making pearl buttons.

Cooperage.—See "Woodworking Machinery."

Cotton-felt Machinery.—See "Excelsior Machinery."

Creamery.—C. A. Chastang, Victoria, Texas, wants creamery machinery.

Dairy Supplies.—John L. Ray, Albertville, Ala., wants prices on supplies for dairy and poultry farm.

Dredging Equipment.—W. H. Gibbs & Co., Columbia, S. C., wants machinery for equipping boat for dredging canals of rice field; 25 horse-power engine required.

Dry-kiln.—See "Excelsior Machinery."

Dynamo.—See "Boiler and Engine."

Electric Plant.—City of Columbus, Miss., C. L. Lincoln, mayor, wants incandescent light plant of about twenty-five lights, also engine.

Electric-light and Power Plant.—Smith River Electric Light & Power Co., Martinsville, Va., will need machinery for electric plant for light and power.

Electric-light Plant.—City of Clayton, Ala., will need entire equipment for water-works and electric-light plant. Address J. S. Williams, mayor.

Electric Motors.—See "Excelsior Machinery."

Electric Plant.—Lacomb Land & Lumber Co., Bayou Lacomb, La., will need small electric plant.

Electric Supplies.—Duncan Light & Power Co., Duncan, I. T., is in market for electric supplies.

Electrical Equipment.—D. B. Gantt, Gantt, Ala., is in market for dynamo and fixtures for changing water-power to electrical power.

Elevator.—Pearsall & Co., Wilmington, N. C., will want elevator, bathtubs and closets.

Engine.—See "Electric Plant."

Engine.—F. S. Royster Guano Co., Norfolk, Va., wants one second-hand 100 to 125-horse-power (Corliss or Putnam) engine; give full particulars as to length of time in use.

Engine.—See "Dredging Equipment."

Excelsior Machinery, etc.—Olive & Myers Manufacturing Co., Dallas, Texas, wants excelsior machinery, cotton-felt machinery, dry-kiln outfit, electric motors, automatic sprinkler equipment, etc.

Fertilizing Machinery.—W. W. Cooper, Flowery Branch, Ga., wants machinery for complete fertilizer factory.

Foundry Equipment.—Pee Dee Machine Co., W. P. Breeden, Jr., manager, Bennettsville, S. C., wants complete equipment for foundry, machine shop and planing mill.

Grinding Machine.—Clark & Hines, Equitable Building, Baltimore, are in market for wet pan grinding machine for sand.

Grinding Machinery.—C. E. Halls, 2013 First avenue, Birmingham, Ala., wants addresses of parties manufacturing machinery for grinding mica.

Hammock Machinery.—Beaumont Manufacturing Co., Spartanburg, S. C., wants addresses of makers of machinery for manufacturing hammocks.

Heating Apparatus.—City of Selma, Ala., wants information on heating apparatus,

steam or hot air, for city building. Address V. B. Atkins, mayor.

Heating Apparatus.—See "Boiler and Engine."

Heating Apparatus.—Bules Creek Academy, J. A. Campbell, principal, Bules Creek, N. C., will want heating plant and water-works for new building.

Hoisting Equipment.—Rock Comfort Lumber Co., Sun Hill, Ga., is in market for heavy hoisting machine and steel-wire cable.

Hoisting Equipment.—Levi Jones, Broadwing, W. Va., wants double engine lumber hoist and boiler complete for hoisting lumber.

Hoisting Equipment.—See "Railway Equipment."

Levee Construction.—Harry N. Pharr, chief engineer St. Francis levee board, Memphis, Tenn., will open bids July 1 for all the new construction and repair work in the St. Francis levee district of Arkansas. Copies of specifications are being prepared in engineer's office for use of contractors who contemplate bidding on any of the work.

Light Station.—Capt. Wm. B. Craighill, United States army engineer eighth light-house district, Mobile, Ala., will open bids June 25 for furnishing materials and labor necessary for construction and delivery of the Sabine Bank light station, Texas, in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to Wm. B. Craighill.

Lumbering Equipment.—See "Trucks."

Machine Tools.—See "Foundry Equipment."

Marble and Granite Works.—Taylor Marble and Granite Works, Taylor, Texas, wants designs of granite and marble monuments ranging in price from \$50 to \$500; later on may want air compressor and automatic tools.

Mining Equipment.—Bridgeport Coal & Coke Co., C. F. Seafeld, secretary, Bridgeport, Ala., wants general mining machinery and supplies for coal-mining plant of 500 tons daily capacity.

Mining Equipment.—H. G. Bender, manager El Dorado Ochre Mining Co., 12 S. Howard street, Akron, Ohio, wants crushers, dryers, graders, boilers, bolters, engines, etc., for ochre plant.

Ochre Plant.—See "Mining Equipment."

Oil Manufacturers.—See "Printing Outfit."

Oil Mill.—W. D. Morgan, Georgetown, S. C., wants prices on complete cottonseed-oil-mill equipment.

Oil Mill.—Planters' Cotton Oil Co., Indianola, Miss., wants complete 60-ton cottonseed-oil mill.

Paving.—C. G. Rives, comptroller, Shreveport, La., will open bids June 25 for 90,000 yards of street paving in accordance with plans and specifications on file with city engineer. Special blanks for bids will be furnished. Certified check for 10 per cent. of amount of bid must accompany each proposal. Bond required and usual rights reserved.

Planing Mill.—See "Foundry Equipment."

Plumbing Equipment.—See "Elevator."

Railway Equipment.—Tidewater Quarry Co., Norfolk, Va., will be in market for a few switches for 30-pound rails and one stationary three-drum hoisting engine.

Printing Outfit.—Dr. T. B. Smith, Cynthiana, Ky., is in need of printing outfit, including presses, type, etc.; also wants addresses of manufacturers of essential oils.

Quarrying Equipment.—See "Marble and Granite Works."

Railroad Construction.—Staples Mercantile Co., Staples, Texas, would like to correspond with parties interested in building railroads.

Railway Equipment.—Dawson Coal & Coke Co., J. W. Dawson, general manager, Cedar Grove, W. Va., wants prices quoted on 600 tons new steel rail 56, 60 or 65-pound, with angle bars to match, delivered at Cedar Grove, K. & M. Ry.

Railway Equipment.—Continental Equipment Co., Whitehall Building, 5-17 Battery Place, New York, N. Y., is in market for 15 and 35-ton "Shay" or "Climax" locomotive.

Roofing.—Meridian Cotton Mills, Meridian, Miss., is in market for 100 or 200 squares warehouse roofing.

Safes.—Wilkes Lumber Manufacturing Co., North Wilkesboro, N. C., wants second-hand safe with inside measure 26 inches wide, 30 inches high, with depth of at least 14 inches.

Seawall.—H. C. Taylor, chief of bureau of navigation, Navy Department, Washington, D. C., will open bids June 17 for a seawall at United States Naval Academy, Annapolis, Md. Blank forms of proposal, specifications

and plans will be furnished on application to bureau or at Naval Academy, Annapolis.

**Sewer Construction.**—C. G. Rives, comptroller, Shreveport, La., will open bids June 26 for brick and pipe sewer construction. Plans and specifications and blank proposals may be seen and obtained at office of city engineer. Each bid must be accompanied by certified check for 10 per cent. of amount of bid. Bond required and usual rights reserved.

**Skidder.**—Farrell-Miles Lumber Co., Limited, Little Rock, Ark., wants to buy second-hand skidder.

**Sprinkler Equipment.**—See "Excelsior Machinery."

**Steel.**—Room 316, Empire Building, Atlanta, Ga., wants samples and prices on aluminum steel or aluminum coated steel suitable for making vats and tanks.

**Steel Tower and Tank.**—Mayor, Biloxi, Miss., will open bids June 5 for steel tower and tank.

**Stone Quarries.**—J. M. Crim, Flowery Branch, Ga., contemplates developing and marketing elastic sandstone.

**Telephone Equipment.**—Livingston Telephone Co., Livingston, Texas, wants complete equipment and supplies for telephone system.

**Textile Machinery.**—See "Hammock Machinery."

**Trucks.**—Baltimore Mahogany Co., 600 Maryland Trust Building, Baltimore, Md., is in market for trucks for carrying mahogany logs from thirty inches diameter down; weight about one ton.

**Water-works.**—See "Heating Apparatus."

**Water-works.**—See "Electric Light Plant."

**Well-drilling.**—Rayne Planters' Oil & Development Co., Rayne, La., is receiving bids for boring oil wells.

**Well-drilling.**—Jackson Bros. Lumber Co., Wilsonville, Ala., desires to let contract for artesian well near Tallahassee, Fla., and so-far correspondence and bids per foot for well with ample flow for large saw-mill plant.

**Woodworking Machinery.**—Casper Company, Winston-Salem, N. C., is in market for purchase of second-hand or new machinery (except boiler and engine) capable of manufacturing from 200 to 500 four and three-quarter gallon oak kegs per day.

**Woodworking Machinery.**—Kelly Lumber Co., Limited, Monroe, La., will need later on lathe machines and planers.

**Woodworking Machinery.**—East End Lumber Co., Louisville, Ky., is in market for double surfacer 26 to 30, second-hand; self-feed rip saw, 7 to 10 molder, automatic cut off saw, improved mortising machine, pulley style boring machine, band saw and jig saw, new or second-hand.

**Woodworking Machinery.**—D. N. Holway & Co., Tampa, Fla., wants machinery and material for manufacture of cigar boxes.

## TRADE NOTES.

**H. E. Maxfield & Co.**—This firm has been established at 136 Liberty street, New York, by H. E. Maxfield, formerly resident agent for Lawrence centrifugal pumps. All inquiries received for centrifugal pumping machinery, house pumps, hoisting engines and general machinery will be given prompt attention.

**Brush-Finishing Machine.**—Flour millers looking for additional equipment are advised that the J. E. M. Milling Co. offers for sale a No. 1 Enrica brush-finishing machine, capacity 150 to 180 bushels per hour, in good condition. The machine has had but little use, and can be had at a bargain price. The company's address is Frankfort, Ky.

**Zelnicke Has Chicago Offices.**—Buyers of railway, mill and factory supplies and machinery of all kinds will be interested in being notified that the Walter A. Zelnicke Supply Co. of St. Louis has established an office in Chicago. The location is 825 Old Colony Building, H. L. Schanberg being in charge. The other Zelnicke branch houses are at Mobile, New Orleans, Houston and Seattle.

**For Manufacturing Underwear.**—An established plant equipped with modern machinery to manufacture men's and women's underwear is available to purchase. Those who contemplate investing in the Southern textile industry will find that this offer comprises an excellent opportunity. The equipment includes fourteen knitting frames, with sewing machines, etc., to match. Further information can be obtained by addressing Grekil, care of Manufacturers' Record.

**El Dorado Ochre Mining Co.**—This enterprise is preparing to equip its mines with complete modern plant for mining and reduction of ochre deposits, and will have an output of ten tons daily to start with. This output will be greatly increased immediately. H. G. Bender, manager of the company, is located at 12 S. Howard street, Akron, Ohio, and is prepared to receive proposals on machinery needed, such as boilers, engines, belt-ers, crushers, dryers, grinders, etc.

**Sullivan Branch at St. Louis.**—Buyers of mining machinery are advised that the Sullivan Machinery Co. of Chicago finds it necessary to establish a branch office in St. Louis. Offices 1209 and 1210 Missouri Trust Building have been secured, and P. F. Jarvis, who has made St. Louis his headquarters for two years, will manage the new office. Mr. Jarvis will give his personal attention to the interests of the company's friends and patrons in the mining and quarrying business.

**Peters' Ammunition Again Victorious.**—At the Pennsylvania State shoot, May 18, 19 and 20, some remarkable results in marksmanship were attained by James Atkinson of Newcastle, Pa. He won the high average in the open amateur and State events, the combined general average, and tied the winner of the State championship. In the regular events shooting at 500 targets he scored 476, an average of over 95 per cent. Mr. Atkinson used Peters' ideal factory loads, with Dupont powder.

**Schoonmaker's Removal.**—Buyers of new and second-hand machinery, railway and contractors' supplies, and those who are already customers of the A. G. Schoonmaker Company are invited to notice that the company's office and warehouses have been removed to 29 West street, New York. The new location is convenient to all railroad and elevated depots, and the facilities for conducting business are more convenient and commodious. This company buys and sells machinery of all kinds.

**Coal Properties for Sale.**—Opportunities in the coal industry are especially sought at this time. Developments in coal mining are on a rapid increase because of the extra demand for coal caused by the unusual activity prevailing in all industrial circles. A number of coal properties in tracts of 2500 to 20,000 acres, located on railroad and ready for active operation, are now offered for sale. The coal is of fine quality for coking, steam and domestic purposes. Messrs. J. P. Hornaday & Co., Bell Block, Cincinnati, Ohio, can be addressed for full details.

**Specialists in Electrical Machinery.**—There is no more important class of machinery used for modern purposes than that which is included in the term electrical machinery. This branch of mechanical equipment attracts to its service in manufacturing, dealing and operating a high class of business men. It is pertinent to state in this connection that Messrs. J. W. Kohn & Co. of 71 Bollivar street and Avon lane, Cleveland, Ohio, are wholesale dealers in electrical machinery, metals and drosses, etc., and make a specialty of appraising electric-light plants.

**Standard Electric Co.**—This well-known Norfolk (Va.) contractor has for its watchword "Everything Electric." It is constantly obtaining large and important contracts throughout the South for lighting industrial plants, for building and equipping railways, etc. The Standard Electric Co. has just closed contract with Greensboro, N. C., for an extension of one and one-half miles of trolley line, including a trestle; also has contracts with Watts Cotton Mills, Laurens, S. C., and Laurens (S. C.) Cotton Mills for about 800 incandescence and 160 arc lights.

**Thomas W. Simpers.**—Those who purchase iron and steel products for any purpose are advised that additional facilities in this regard are now available through Thomas W. Simpers. Mr. Simpers has established offices at 802 Crozer Building, 1420 Chestnut street, Philadelphia, Pa., and is prepared to handle business in the line of blooms, billets, sheet bars, plates, sheets (black, galvanized and corrugated), bars, hoops, bands, shapes, tin andterne plates, etc. He was formerly district sales agent of the American Sheet Steel Co. and the American Steel Hoop Co., and is thoroughly posted regarding the products he will handle.

**Buchanan-Foster Building Materials.**—Roofing, building papers, asphalt products, etc., for building purposes continue to be in great demand. Makers of this class of building materials find their manufacturing plants busily engaged in filling orders. A more settled state of labor difficulties in the near future will doubtless make an even greater demand. The Buchanan-Foster Com-

pany of Philadelphia, offices at 724 Drexel Building, Fifth and Chestnut streets, is one of the best-known distillers of coal tar and manufacturers of asphalt products, roofing and building papers. Buyers in its field are invited to obtain information and prices on its goods.

**Cypress Timber and Plant.**—Louisiana is noted for its production of cypress timber, which is largely used for special purposes in various manufacturing directions. There are extensive tracts of this timber as yet undeveloped, awaiting the axe and saw of the progressive operator. Certain valuable cypress timber properties in Southeast Louisiana on the Southern Pacific Railway are now offered for sale, and they constitute an exceptional opportunity for investors and millers. Sixty million feet of virgin growth is in one body, and the accompanying plant is new, with daily capacity of 25,000 feet of lumber. About 40,000,000 feet of additional cypress timber tributary to this mill can also be had. W. H. Norris Lumber Co. of Houston, Texas, can be addressed for further information.

**A Modern Wire Plant.**—Bare and tinned copper wire and magnet wire are products which are in great demand at this time, especially in connection with developments in the electrical industry. Wire of this character of the best quality is called for in various avenues of electrical construction and equipment, its manufacturers finding the demand constantly on the increase. The Empire Wire Co. of 92 William street, New York, is a prime factor in supplying the demand for the kind of wire mentioned. It has found it necessary to largely increase the output, and to effect this has leased the Granite State Electrical Works at Lisbon, N. H., remodeled same and made improvements to its mill at Rome, N. Y. This doubles its output of magnet wire and puts the company in a position to give large contracts immediate and prompt attention.

**Linde Ice Machinery.**—Summer being near at hand, there is an increasing demand for ice and refrigerating machines and for the supplies needed in establishments where they are operated. The Linde Ice Machine is one of the most popular built; its numerous advantages and its superiority in operation delight the exacting ice-maker and cold-storage man. The Fred W. Wolf Company of Chicago builds the machines mentioned. Its list of recent sales shows buyers in all sections of the United States, including Arkansas, Texas, Louisiana, Tennessee and Missouri in the South. Well-known packers, meat and produce houses, ice manufacturers, brewing companies and ice-machine makers are among the customers. The ice plants sold lately range in size from six to fifty tons, and the refrigerating plants from six to 150 tons. Large orders are also filed for direct expansion piping, double pipe ammonia condensers, valves and fittings, etc.

**A Lidgerwood Change.**—Lidgerwood Manufacturing Co. has made an important change in its logging machinery department, and this is now established at the New York headquarters, 96 Liberty street. Until recently this branch has been confined to the South and the Pacific slope, and was handled by offices in Atlanta, Ga., and Portland, Ore. J. M. Dickinson had general supervision of the Southern business for years, associated with M. H. Dickinson, his brother, who has a wide practical experience in logging by steam. J. M. Dickinson is now in charge in New York. An office has also been opened at 315 Second avenue, South, Seattle, Wash., where M. H. Dickinson is in charge. Logging by steam is no longer confined to any one section of the United States, but machinery for this purpose is being employed generally throughout North America. A number of important foreign shipments have recently been made by the Lidgerwood Manufacturing Co.

**Enamelled Plumbers' Ware.**—The extraordinary activity which has been prevailing in building circles throughout the country naturally creates a large demand for building materials and supplies. Modern contractors and owners are not satisfied with any but the best possible equipments for health and convenience, and because of this manufacturers of plumbers' ware, hydraulic rams, pumps, etc., are busily engaged in their factories. The Barnes Manufacturing Co. of Mansfield, Ohio, is one of the best-known makers in this field, having agencies in the principal cities North, East, South and West. This company is now building a new plant for enamelling sinks, lavatories, closets, bathtubs and other plumbers' ware, besides making improvements in its plant generally. (An expert enamel of national reputation has been secured.) These improvements are

to include the installation of electrical apparatus throughout. Barnes' product includes also iron and brass pumps for hand, wind-mill and power use, double-acting force pumps, rotary, tank and spraying pumps, hydraulic rams, cast-iron sinks, steamfitters' supplies, etc.

**Crane and Hoist Trade.**—Messrs. Pawling & Harnishfeger, crane and hoist builders, Milwaukee, Wis., advise that during April there was a decided hesitancy on the part of buyers, who apprehend labor troubles about May 1. As these labor troubles, except in certain localities, have adjusted themselves, the business situation appears healthy, as judged by buying and settlements. With regard to labor matters the firm states that Milwaukee is more free from difficulties between employers and employees than any manufacturing city of note in the United States. The many new and modern shops planned by railroads have resulted in a large volume of estimates for crane equipment. Many of these contracts will be closed within thirty days. The steel and iron plants still continue the heaviest buyers, though the demand for cranes is broadening. The market is about the same as during May, 1902, though does not reach the proportions prevailing last September. The old Nordberg shops, leased and equipped by Pawling & Harnishfeger to replace their erecting shop burned April 15, have placed them in as good shape to build cranes as prevailed before the fire. Since last report the firm has booked orders from thirty-five leading industrial plants located in all parts of the United States.

**Union Brick Bonds and Handlers.**—Architects and builders are fast becoming familiar with the use of the Union brick bonds, which are acknowledged to be very practical and efficient for all purposes, saving material and labor, making the strongest wall and best bond. Progressive builders fully realize that the time consumed in clipping brick and great waste of material in so doing causes a monetary loss. The Union bonds are being used by the best architects and builders throughout the country with entire satisfaction. They are constructed so as to eliminate the objectionable features of the old method and greatly facilitate and simplify the work of the bricklayer. The Union bond is correct in principle, perfect in adaptability, and its inexpensiveness should recommend it to all builders; it cannot pull out or loosen under any condition. The Union bond is made from galvanized steel and used for bonding face brick, terra-cotta, veneering hollow walls, etc. It is made by the Union Brick Bond Co., 632 Penn avenue, Pittsburg, Pa. This company also manufactures a brick carrier which is a very practical apparatus. The brick handler weighs five pounds, and lifts ten bricks. It is a money-saver for contractors, brick manufacturers and dealers. It is an adjustable self-locking labor-saving device for handling brick or other material.

## TRADE LITERATURE.

**Dallett's Bulletin.**—Buyers of railway and trolley supplies, electrical equipments and other classes of mechanical apparatus now in great demand will find it to their advantage to examine Dallett's Bulletin. This publication is issued by Dallett & Co., 201 Walnut Place, Philadelphia, Pa., presenting a list of their offerings to buyers. The May number enumerates locomotives of all kinds, rails, motors and trucks, cars, turntables, tugboats and barges, steam shovels, etc.

**Wickes Bros.' Stock List.**—All previous monthly stock lists of Messrs. Wickes Bros. are now void, the latest issue, dated May 20, being ready for distribution. The new and second-hand machinery specified in the booklet includes all kinds of equipments—boilers, engines, woodworking machines, machine tools, electrical machinery, metal-working machinery, pumps, etc. Messrs. Wickes Bros. are located at Saginaw, Mich. They have branches in Chicago, Pittsburg, New York and Jersey City.

**Padding Cements and Paste.**—These products, now in large and increasing demand, are referred to in a mailing card being issued by the Arabol Manufacturing Co., the well-known maker of glues, pastes and similar lines of adhesive liquids and powders. The card constitutes the latest price-list of Anchor Padding Composition, Sphinx Pad Cement, Machine Gum, etc. Arabol Manufacturing Co. is located at 100 William street, New York, and solicits correspondence from buyers in its field.

**The Green Book.**—An advance courier of The Green Book is now visiting the trades and electrical buyers and dealers. This advance courier is in the form of a mailable



folder, and is merely the prologue of a good thing, the advance man of a clever electrical supply house. The Green Book will tell you all about things electrical, all about the big seven-story building filled with supplies and apparatus, and something about the trademark "Everbest." The Ewing-Merkle Electric Co. of St. Louis will issue The Green Book. Write for a copy.

**New Kentucky Homes.**—Architectural knowledge is in demand in the South because of the many buildings of all kinds being contracted for every day. Plans and specifications that meet the wants of building owners have been prepared with great success by James L. Long of Hopkinsville, Ky. He issues an illustrated booklet giving facts regarding his work. The publication is entitled "New Kentucky Homes," and will be of interest to those in the South who may contemplate erecting modern residences, business buildings, mills, etc. Contemplative builders are invited to address Mr. Long regarding his facilities for his specialty.

**Sullivan Mining Machinery.**—A brief booklet has been issued to illustrate in a general way the several lines of metal mining machinery manufactured by the Sullivan Machinery Co. The descriptions are of the briefest character, but they serve to interest and prompt further investigation by prospective purchasers of mining, quarrying and kindred equipment. The company builds mining machinery of all kinds, including air compressors of all classes and for any service, Corliss engines, drills, heavy hoisting engines for deep shafts, channellers, quarriers, coal-mining machinery, etc. General offices at 135 Adams street, Chicago; works at Chicago and Claremont, N. H.

**Graphite.**—Every month "Graphite" finds its way to the numerous users of and dealers in graphite throughout the country. This publication's contents for June are of the usual interesting character. Authoritative statements regarding the various uses of graphite and the forms in which it is produced for the market are presented, and pointers on lubrication and other valuable hints are given. "Graphite" is especially intended for the interest of Dixon graphite productions, and is establishing a better understanding in regard to the different forms of graphite and their respective uses. Joseph Dixon Crucible Co., Jersey City, N. J., is ready to send copies to those who ask for them.

**The Southern Saw.**—This necessary article in the lumber and woodworking industry requires more than the usual care for its production in the best possible manner. In the South home makers have marketed saws that have found favor with mill operators throughout all the States. The Southern Saw, as made by the Southern Saw Works of Atlanta, Ga., has been one of the most successful ever offered to buyers. It is made of the best crucible steel. The bits and shanks are drop forged from best tool steel, and are carefully tempered and finished by a superior process. The company named makes solid and inserted-tooth circular saws, single saw collars, mandrels, etc. Its latest price-list will be useful to every buyer of saws and kindred tools.

**Best Oilers and Torches.**—Among the classes of supplies used in various avenues of industry—manufacturing, mining, construction work, railroad operation, etc.—is torches, oilers and kindred devices. In designing and making these articles careful work, high-class materials and practical designs enter. The Gem Manufacturing Co. of Market and Bayard streets, Allegheny, Pa., is especially successful in marketing its steel-brazed oilers and torches. The illustrated booklet issued in reference to the Gem specialties will be mailed to anyone requesting it. The steel-brazed bench oiler, broad top-oilers, pyramid oilers, mammoth or pit car oilers, tallow pots, fillers, oil carriers, grease buckets, pyramid torches, railroad hand torch, hand lamp, etc., are listed. The Gem Manufacturing Co. is successor to the Sands Manufacturing Co., whose plant and entire business it purchased recently. The Gem Company also makes the Union Boiler Tube Cleaner, with which specialty it has earned an enviable reputation among boiler users.

**Information on Building Materials.**—This information is valuable, and is presented in a publication which speaks as briefly as possible on building material in its numerous phases, and endeavors to answer fully and briefly questions that frequently arise in this particular line of business. This makes the booklet a ready reference for busy men, and the index enables one to promptly locate different material and the instructions as to their respective uses. No material that adds

to the construction of a modern building has been neglected. The National Building Supply Co., offices in Manufacturers' Record Building, Baltimore, Md., issues the publication referred to, and signifies its willingness to send copies of the book to those who are sufficiently interested to make application.

**Marine Steam Machinery.**—Designing and constructing marine steam machinery is the specialty of the Marine Iron Works of Chicago. This company produces modern marine machinery (steam only) suitable for vessels ranging from 30 to 160 feet in length. The range of size is complete, covering paddle-wheel as well as screw-propeller machinery, condensing or non-condensing, for either salt or fresh water, as may be required. The large line of marine boilers which the company builds includes the Robert safety water tube, as also the better class of shell marine boilers and for either hard coal, soft coal or wood fuel, as desired. The new Marine catalogue mentions thirty-five different sizes and types of screw-propeller engines and thirty-six different paddle-wheel engines, all of modern type. Fifty different sizes and types of marine boilers are shown.

**Graud Opera Records.**—The achievements of the Columbia Phonograph Co. in the perfection of the graphophone have astonished and delighted the world. This company's machines have made it possible for the people to hear in their own homes the best musical compositions, both classic and popular, at a small expense. Hundreds of thousands of buyers attest the success of this wonderful invention of modern ingenuity. The most recent achievement of the company is to record and reproduce with exact fidelity to nature the voices of the great singers of the world. A most interesting booklet regarding these new records—for use on all disc machines—is now being distributed, and will be mailed to those who think of purchasing. It contains much valuable information concerning the great singers. Those artists whose records are offered include Sembrich, De Reszke, Schumann-Heink, Campanari, Adams, Scotti and Gilbert. The company's main offices are in New York and London, with branches in all the leading cities of the world.

**Hench & Dromgold Products.**—These products have been known to buyers of agricultural implements for many years. They have been during that period received in great favor by thousands of operators whose demands for the most efficient equipments were fully complied with. For nearly a quarter of a century the Hench & Dromgold Co. has been manufacturing. It makes circular-saw mills, portable and stationary engines and boilers, pulleys, hangers, shafting, etc., and all kinds of agricultural implements. Its riding corn cultivator, with pivoted spindles for guiding the machine, has almost a worldwide reputation. Its patent ratchet spring-tooth harrow, introduced ten years ago, has had immense sales. Since building its large new shops the company has added a line of circular-saw mills, engines, grain separators, corn shellers, single and double row corn planters, double and triple shovel plows, trucks, etc. The Hench & Dromgold Co. has issued its latest illustrated catalogue, telling all about its various machines and supplies. Those desiring a copy of this publication can address the main offices at York, Pa.

**Bates' Corliss Engines.**—The latest progress of modern steam engineering is a subject which engaged the attention of all prospective buyers of power equipments. Without going deeply into the subject of giving advice to intending engine buyers, it may be said that the first cost of an engine is to the steam-users its economy and durability, bearing in mind that the ideal economy in a power plant is justly that by which the greatest obtainable results in the way of power supply are produced at the least daily, monthly and yearly expense. The best economy can only be arrived at by superior design of the engine. The durability is as much dependent on the construction as on the design. In view of this, the builder of the Bates Corliss engine feels justified in believing its design to be correct. With some satisfaction and pride that engine's builder also points to its successful installations of gas-compressing plant. These latter equipments undergo severe duty, and very exacting are the requirements made upon them. The notable success met with in this direction is quoted as testimony of the builder's capabilities to produce reliable and efficient work. The Bates Machine Co. of Joliet, Ill., is the builder of these engines and gas compressors, and its latest catalogue is one of the best specimens of trade literature recently issued. Descriptions of the several machines are given, including full details regarding design and material, construction and opera-

tion, etc. Photographic reproductions give views of various styles and sizes of Bates' power-transmitting machinery, complete motive-power plants, air and gas-compressing machinery. The Bates industry has been one of the most notable American examples of progress, noted by the steady growth from a small shop to a thoroughly-equipped modern plant capable of meeting the most rigid demands for high-grade machinery which may be placed with it. All who are interested in machinery of the character referred to are invited to send for illustrated book.

### The Iron and Metal Trades.

In its review of the week the Iron Age says:

"The leading Southern makers, as an association, have at their meeting in Birmingham decided to sell at \$15 for No. 2 at furnace for delivery during the balance of the year. This will probably be widely heralded as a cut of \$1.50 and \$2.50, respectively, from the former nominal prices of \$16.50 to Eastern and \$17.50 to Western points. As a matter of fact, the market has been at the \$15 level for at least two weeks, and it looks as though the association were engaged in a stern chase of the market.

"The real question is whether buyers will abandon the waiting attitude in which they have persisted for some time past, and begin to cover for the future, or whether they can and will persist in buying from hand to mouth; whether an 'official' recognition of the true market by a group of leading sellers will be a sufficiently powerful incentive for action. It is pretty generally conceded that founders have bought very little thus far for the second half, on the threshold of which we now are, but this does not necessarily lead to immediate contracting on a large scale.

"The point is made that we are approaching a level at which a number of poorly located and poorly supplied foundry furnaces will find it hard to make ends meet. It is well understood that every pot which can make iron is running, although at costs which are very high; in fact, the best furnaces, controlling their own raw materials, are struggling with cost figures which they would have deemed impossible three years since. But even the worst of furnaces do not blow out until the last hope has been exhausted, while pressure on inflated costs usually yields considerable readjustments.

"The next few weeks will establish the position of buyers, to be determined largely by the rate at which they expect to meet."

It is said that there is more activity in the phosphate mines of Maury county, Tennessee, at this time than for the past three years. It is estimated that there are nearly 5000 miners at work in the mines, 3000 of whom are located at Mt. Pleasant. The mines at that place, Carter's Creek, Southport, Spring Hill and other centers are working full crews, and some companies are after more miners. The price of rock continues firm at good prices.

The report of State Mine Inspector Shifflett of Tennessee shows that during the past year 4,232,332 tons of coal, valued at \$5,728,921; 628,870 tons of iron, valued at \$754,644; 454,078 tons of phosphate, valued at \$1,341,973, constituted the bulk of the mineral products of the State, having a total of 6,216,831 tons, valued at \$9,643,973. The number of persons engaged in mining was 14,984.

The Alabama Consolidated Coal & Iron Co. has declared the fourteenth dividend of 1% per cent. on its preferred stock.

Western millers will export flour through Galveston during the summer months.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office Manufacturers' Record,  
Baltimore, Md., June 3.

Dullness continues to prevail in the Baltimore stock market. There is little support to anything of a speculative nature, and it seems possible to make sales only at concessions, so small is the demand. During the week prices were generally rather drab, consequently the Decoration Day holiday caused a cessation of trading that was not disappointing. United Railways, Seaboard and G. B. S. Brewing issues were all quiet, and Cotton Duck was distinguished by a sagging tendency, which resulted chiefly, according to street reports, from the delay in completing the merger plan.

In the trading, United Railways common declined from 12½ to 12¼, recovering to 12½, while the incomes fell from 68¼ to 67½, and ex coupon from 65¼ to 65½; the 4s selling from 93 down to 92½, recovering to 92¾, and the Light and Power 4½s at 85. United Railways scrip sold at 23. Consolidated Gas sold at 68¼ to 69, and then down to 68½; the 6 per cent. bonds at 111, the 5s at 113¾, and the 4½s at 102; Seaboard common sold between 23¼ and 24¼, the preferred from 40¼ to 41¼, the 4s from 80¼ to 81, and the 5s from 101¾ to 102; Cotton Duck common was traded in from 3¼ down to 2½, while the incomes dropped from 21¼ to 19, the 5 per cents. selling from 69¼ down to 68¼; United States Cotton Duck at 4 and then 2½. G. B. S. Brewing common changed hands at 11½ to 12½, the income scrip at 35¼ and 36, and the 1sts at 49½.

Central Trust rose from 61 to 63, and Union Trust sold at 63; Old Town Bank at 11; Commercial & Farmers' at 130; Marine, 37½; Mechanics, 31¾, and Merchants, 189½ and 190.

Other securities traded in were as follows: Atlantic Coast Line of Connecticut, 265; Atlantic Coast Line, new 4s, 86½ and 87; do, 1st consolidated 4s, 93½ to 93¾; North Carolina 4s, 1913, 105½; South Bound 5s, 109½; West Virginia Central 6s, 113; Baltimore Brick, 8; Baltimore & Ohio, 87; Georgia, Carolina & Northern 5s, 110½; Savannah, Florida & Western 6s, 130; Alabama Consolidated Coal & Iron preferred, 85; Baltimore City 3½s, 1930, 110¾; Georgia & Alabama Consol 5s, 110¼ and 110½; City & Suburban 5s, Baltimore, 115¼, and ex coupon at 113; Baltimore Refrigerating & Heating Co., 43; do, 5s, 97¼; Atlanta & Charlotte 1sts, 111¾; Charleston City Railway 5s, 106¾; Consolidation Coal, 83; Baltimore City 5s, 1916, F. L., 120; Baltimore Traction 5s, 115; City & Suburban 5s, D. C., 98; Knoxville Traction 5s, 101; Augusta Street Railway 5s, 101½; Norfolk & Carolina 1st 5s, 116½; Maryland Telephone 5s, 85; Georgia, Southern & Florida 5s, 115½; Firemen's Insurance, 22½; Newport News & Old Point 5s, 100; Wilmington & Weldon 5s, 120.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
June 3, 1903.

Railroad Stocks.	Par.	Bid.	Asked
Georgia Sou. & Fla. 1st Pref.	100	78	78
United Railways & Elec. Co.	50	12¼	12¼
Seaboard Railway Common	100	24	24½
Seaboard Railway Preferred	100	40½	41
Atlantic Coast Line	100	120	127
Atlantic Coast Line of Conn.	100	260	269

Bank Stocks.		
Commercial & Far. Nat. Bank	100	130
Farmers & Mer. Nat. Bank	100	108
German Bank	100	108 1/2
German-American Bank	100	108 1/2
Manufacturers' National Bk.	100	102
Merchants' National Bank	100	108 1/2
National Bank of Baltimore	100	120 1/2
National Bank of Commerce	15	27 1/2
National Exchange Bank	100	103
National Marine Bank	30	37 1/2
Second National Bank	100	100
Trust, Fidelity and Casualty Stocks.		
Central Real Estate & Trust	50	63 1/2
Colonial Trust	50	32
Fidelity & Deposit	50	156
International Trust	100	130
Maryland Casualty	25	52
Maryland Trust	100	194
Union Trust	50	60
U. S. Fidelity & Guaranty	100	138
Miscellaneous Stocks.		
G. B. & S. Brewing Co.	100	11 1/2
Cotton Duck Votung Trust	100	2 1/2
Consolidated Coal	100	81
George's Creek Coal	100	90
Consolidated Gas	100	68 1/2
Railroad Bonds.		
Albany & Northern	96	97 1/2
Atlanta & Charlotte 1st 7 1/2, 1907	111	111
Char. Col. & Aug. 2d 7 1/2, 1910	114	116
Georgia, Ca. & North 1st 5 1/2, 1929	110 1/2	110 1/2
Georgia South. & Fla. 1st 5 1/2, 1915	114 1/2	115 1/2
Petersburg, Class B 6 1/2, 1926	127	127
Seaboard & Roanoke 5 1/2, 1926	111 1/2	112 1/2
Virginia Midland 2d 6 1/2, 1911	112 1/2	112 1/2
Virginia Midland 4th 3-4-5, 1921	110	110
Virginia Midland 5th 5 1/2, 1925	114	114
West. North Carolina Con. 6 1/2, 1914	114	114
West Virginia Central 1st 6 1/2, 1911	112	112
Wilmington, Col. & Aug. 6 1/2, 1910	114	114
Wilmington & Wel. Gold 5 1/2, 1925	120	120 1/2
Charleston City Railway 5 1/2, 1923	106 1/2	107 1/2
Charleston Con. Electric 5 1/2, 1929	88	91
Knoxville Traction 1st 5 1/2, 1928	100 1/2	101
Newport News & Old Pt. 5 1/2, 1928	100	100 1/2
Norfolk Street Railway 5 1/2, 1944	100	110
United Railways 1st 4 1/2, 1919	92 1/2	92 1/2
United Railways Inc. 4 1/2, 1919	65 1/2	65 1/2
Seaboard 4 1/2, 1919	80 1/2	80 1/2
Seaboard 10-year 5 1/2, 1919	101 1/2	102
Lexington Railway 1st 5 1/2, 1919	105	105
Georgia & Alabama Con. 5 1/2, 1919	109 1/2	110 1/2
South Bound 5 1/2, 1919	109 1/2	109 1/2
Augusta Ry. & Elec. 1st 5 1/2, 1919	101 1/2	101 1/2
Miscellaneous Bonds.		
Mt. V. & Woodby's Cot. Duck 5 1/2, 1919	68 1/2	68 1/2
Mt. V. & Woodby's Cot. Duck Inc., 1919	18 1/2	19 1/2
G. B. & S. Brewing 1st 3-4-5, 1921	49 1/2	50
G. B. & S. Brewing 2d 3-4-5, 1921	35	35
United Elec. Light & Power Bds., 1919	84	85
Consolidated Gas 6 1/2, 1919	116 1/2	116 1/2
Consolidated Gas 5 1/2, 1929	112	112 1/2

## SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending June 2.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	80	80
Aiken Mfg. Co. (S. C.)	88	90
Anderson Cotton Mills (S. C.)	123	126
Arkwright Mills (S. C.)	120	120
Augusta Factory (Ga.)	65	65
Avondale Mills (Ala.)	100	100
Beltton Mills (S. C.) (old)	100	100
Bibb Mfg. Co. (S. C.)	108 1/2	108 1/2
Brandon Mills (S. C.)	101	101
Buffalo Cotton Mills (S. C.)	101	101
Buffalo Cotton Mills (S. C.) Pfd.	100	100
Cabarrus Cotton Mills (N. C.)	102	102
Chiquola Mfg. Co. (S. C.)	100	100
Clifton Mfg. Co. (S. C.)	170	177
Clinton Cotton Mills (S. C.)	118 1/2	118 1/2
Courtenay Mfg. Co. (S. C.)	130	132
Columbus Cotton Mills (Ga.)	94	99
Dallas Mfg. Co. (Ala.)	90	90
Darlington Mfg. Co. (S. C.)	93	97
Eagle & Phenix Mills (Ga.)	100	100
Easley Cotton Mills (S. C.)	103	103
Enoree Mfg. Co. (S. C.)	85 1/2	85 1/2
Enterprise Mfg. Co. (Ga.)	70	80
Exposition Cotton Mills (Ga.)	103	103
Gaffney Mfg. Co. (S. C.)	85	87
Gainesville Cotton Mills (Ga.)	85	85
Granby Cot. Mills (S. C.) 1st Pfd.	100	102
Granby Cotton Mills (S. C.) Pfd.	99	101
Graniteville Mfg. Co. (S. C.)	100	103
Greenwood Cotton Mills (S. C.)	99	99
Grendel Mills (S. C.)	105	105
Henrietta Mills (N. C.)	203 1/2	203 1/2
King, John P. Mfg. Co. (Ga.)	65	65
Lancaster Cotton Mills (S. C.)	100	110
Lancaster Cot. Mills (S. C.) Pfd.	100	104
Langley Mfg. Co. (S. C.)	100	100
Laurens Cotton Mills (S. C.)	170	170
Lockhart Mills (S. C.)	100	100
Louise Mills (N. C.)	96	96
Louise Mills (N. C.) Pfd.	102	102
Marlboro Cotton Mills (S. C.)	106	108
Mayo Mills (N. C.)	170	170
Mills Mfg. Co. (S. C.)	100	99
Mills Mfg. Co. (S. C.) Pfd.	103	103
Monarch Cotton Mills (S. C.)	101	101
Monaghan Mills (S. C.)	101	101
Newberry Cotton Mills (S. C.)	120	120
Norris Cotton Mills (S. C.)	110	113 1/2
Olympia Cotton Mills (S. C.)	104	104
Olympia Cotton Mills (S. C.) Pfd.	98	98
Odell Mfg. Co. (S. C.)	100	102
Orangeburg Mfg. Co. (S. C.) Pfd.	103	105
Orr Cotton Mills (S. C.)	103	102
Pacolet Mfg. Co. (S. C.)	102	102
Pelzer Mfg. Co. (S. C.)	167	173 1/2
Piedmont Mfg. Co. (S. C.)	175	175
Poe, F. W., Mfg. Co. (S. C.)	140	140
Richland Cotton Mills (S. C.)	99	99
Richland Cotton Mills (S. C.) Pfd.	102	102
Ronoke Mills (N. C.)	102	102
Saxon Mills (S. C.)	102	102
Sibley Mfg. Co. (Ga.)	64	65
Southern Cotton Mills (N. C.)	95	95
Spartan Mills (S. C.)	135	135
Trion Mfg. Co. (Ga.)	125	150
Tucupau Mills (S. C.)	140	140
Union Cotton Mills (S. C.)	152 1/2	152 1/2
Union Cotton Mills (S. C.) Pfd.	100	102
Victor Mfg. Co. (S. C.)	130	136
Warren Mfg. Co. (S. C.)	100	100
Warren Mfg. Co. (S. C.) Pfd.	106	106
Wash'ton Mills (Va.) Com. & Pfd.	105	105
Washington Mills (Va.) Common	20	20
Whitney Mfg. Co. (S. C.)	110	110
Wilmington Cot. Mills (N. C.) Pfd.	100	100
Wiscasset Mills (N. C.)	115	118
Woodruff Cotton Mills (S. C.)	98	98

## Mexican National Plan.

As will be seen by an advertisement upon another page, Messrs. Speyer & Co. of New York and Speyer Bros. of London give notice to the holders of common stock voting trust certificates of the National Railroad of Mexico who may desire to take advantage of the agreement with the government of Mexico—by which the latter will purchase a large amount of the capital stock of the company—that they must deposit their certificates on or before June 10 with either Speyer & Co. in New York, Speyer Bros. in London, or Teixeira de Mattos Bros. in Amsterdam. Receipts will be given for the same. The advertisement referred to gives full description of the arrangement with the Mexican government and the distribution of securities under it.

## New Corporations.

The Farmers and Merchants' Bank of Amory, Miss., has been incorporated, with an authorized capital of \$5000.

The Laurel National Bank has been organized at Laurel, Miss., with \$75,000 capital, to succeed the People's Bank of Laurel.

The Bank of Lincoln, capital \$10,000, has been incorporated at Lincoln, N. C., by B. L. Grigg, W. E. Grigg and W. A. Hoke.

The Hancock Bank of Hancock, Md., is reported as being organized by the Farmers' Trust, Banking & Deposit Co. of Baltimore.

The People's National Bank of Roanoke, Va., capital \$100,000, has been authorized to begin business. George H. P. Cole is treasurer.

The Mutual Life Insurance Co. has been organized at Edberton, Ga. J. J. Burch is president, and J. W. Harris, secretary and treasurer.

The Mutual Investment Co. of Lexington, Ky., has been incorporated, with \$12,500 capital, by T. B. Hoover, A. P. Taylor and William Hoover.

The Bank of Jonesboro has been incorporated at Jonesboro, N. C., with \$12,500 capital, by Richard M. Neeson, Augustus N. Huntley, B. F. White and W. A. Fass.

The Oklahoma Storage & Brokerage Co. of Oklahoma City has been incorporated, with \$50,000 capital, by S. H. Brown, Kee R. McKee, C. S. Hoffman and others.

The First National Bank of Kennedy, Texas, has been approved; capital \$25,000. The organizers are J. L. Browne, S. C. Butler, A. J. Bell, J. W. Ruckman and T. D. Ruckman.

The First National Bank of Clinton, Okla., capital \$25,000, has been approved. The organizers are T. J. Nance, E. E. Blake, Otto A. Spette, H. T. Smith and Charles L. Engel.

The First National Bank of Pearsall, Texas, which has been approved, was organized, with \$25,000 capital, by A. V. Harris, W. T. Johnson, R. G. Long, J. N. Long and H. E. Johnson.

The Southern Discount Co. has been chartered at Nashville, Tenn., with \$5000 capital. The incorporators are E. Wright, T. G. Newman, L. P. Jones, Frank W. Lee and Samuel T. Light.

The Savings & Loan Co. has applied for a charter at Atlanta, Ga.; capital \$10,000. The incorporators are C. A. Barrett, W. B. Roberts, A. P. Brown, T. W. McArthur and J. N. Bateman.

The Elm City Bank of Wilson county at Elm City, N. C., has been incorporated, with \$25,000 capital. The stockholders are John L. Bailey, E. O. McGowan and Emma B. Bailey of Elm City.

Okmulgee National Bank of Okmulgee, I. T., capital \$50,000, recently approved, was organized by John T. Stewart of

Wellington, Kan.; George T. Pitts, P. F. Randolph, W. E. Wood, T. T. Godfrey and others.

The Mississippi Bond & Investment Co. has applied for a charter at Memphis, Tenn.; capital \$25,000. The incorporators are J. Odd Hamilton, O. F. Tucker, W. P. Adams and John P. Bullington. T. B. Tucker is to be manager.

The Mississippi Investment Co. has been organized at Jackson, Miss., with \$50,000 capital, by Wirt Adams of Jackson, president; W. Q. Cole, secretary, and A. Nelson, treasurer. Charles Whitcomb of Terre Haute, Ind., is vice-president.

A new national bank is reported organized at Centralia, Mo.; capital \$50,000. The directors are D. T. Turner, W. D. Shock, Allen Park, M. S. Kalambach, W. W. Jennings, G. H. Hacke, L. M. Dozier, H. S. Williamson and George L. Denham.

The Bank of Yellville has been incorporated, with \$25,000 capital, at Yellville, Ark., by Sue Layton, Walter E. Layton, Flora A. Layton, Edna E. Berry, Virgie L. Walton, Flora A. Layton; trustees, J. C. Floyd, I. J. Baker and J. F. Davis.

The Hohenwald Bank & Trust Co. has been organized at Hohenwald, Tenn.; capital \$15,000. The officers are W. J. Hale, president; M. R. Cox, cashier; directors, C. D. Lovelace, John A. Goodman, O. A. Prince, W. B. Murphree, E. M. Hinson, J. W. Armstrong and H. Smitherst.

The Marietta Street Bank is reported as being organized in Atlanta, Ga., with \$25,000 capital, by William Powell, C. K. Winship, E. O. Miles, M. B. Young, A. S. Taylor, B. F. Galphin, Armstrong Bros., George Sims, Steve Glass, Morton Hardware Co., James Sharp, Dr. G. C. Mizelle, H. M. Beutell and others.

The Realty Investment Co. of Memphis, Tenn., capital \$25,000, has been organized by electing officers as follows: J. W. Shepherd, president; L. C. Neffler, vice-president; D. M. Armstrong, secretary and treasurer; A. P. Gaither, manager; directors, A. P. Gaither, A. Goodman, J. W. Shepherd, L. C. Neffler, D. Sternberg, C. L. Clancy, D. M. Armstrong, Samuel Behr and Thomas Dies.

## New Securities.

Louisville, Ky., will sell in July \$1,000,000 of refunding bonds.

Clarke county, Georgia, is to vote upon an issue of \$100,000 of 4 per cent. bonds.

Dallas county, Texas, proposes to issue \$500,000 of bonds for roads and bridges.

Morristown, Tenn., has sold \$25,000 of 5 per cent. 5-20 bonds to N. W. Harris & Co. at 102.

The Florida legislature has passed a bill authorizing an issue of \$100,000 of improvement bonds.

Charlotte, N. C., has sold \$100,000 of 4 1/2 per cent. 30-year bonds to E. D. Shepard & Co. of New York at 103.

The \$400,000 bond issue for sewer and water-works improvements in Atlanta, Ga., has been confirmed by the court.

Rayne, La., has sold to F. R. Fulton & Co. of Chicago \$20,000 of water-works and electric-light bonds at par.

Brunswick county, North Carolina, has sold \$12,000 of 20-year 5 per cent. jail bonds to C. A. Webb & Co. at 104.541.

The State of Maryland will receive bids until noon on June 24 for \$200,000 of the State 3 per cent. loan of 1902, due July 1, 1917.

The Chicago, Rock Island & Texas Railway has been authorized to issue \$1,395,245 of 5 per cent. 30-year bonds on 144 miles of road in Texas.

Clayton, Ala., will receive bids until June 13 for \$20,000 of municipal electric-light and water bonds. J. S. Williams is mayor, and J. J. Winn is city clerk.

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The Apalachia Tannic Acid Co., E. C. Myers, president, Apalachia, N. C., is to issue \$100,000 of first mortgage 6 per cent. gold bonds, and is also to increase its stock to \$100,000 for the purpose of securing timber lands, railroads and other properties for its business.	
The Belvedere Building Co. of Baltimore, Md., has decided to issue \$250,000 more of second mortgage 5 per cent. bonds, making the total issue \$500,000. The amount of common stock is reduced \$250,000, making it also \$500,000. The first mortgage is for \$850,000. The company is building the Belvedere Hotel.	
Financial Notes.	
The United States Trust Co. of Louisville, Ky., has occupied its new building. Joshua D. Powers is president.	
Mr. H. A. Orrick has been elected president of the Baltimore Stock Exchange to fill the vacancy caused by the death of Mr. Derick Fahnestock.	



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